

FIG.2

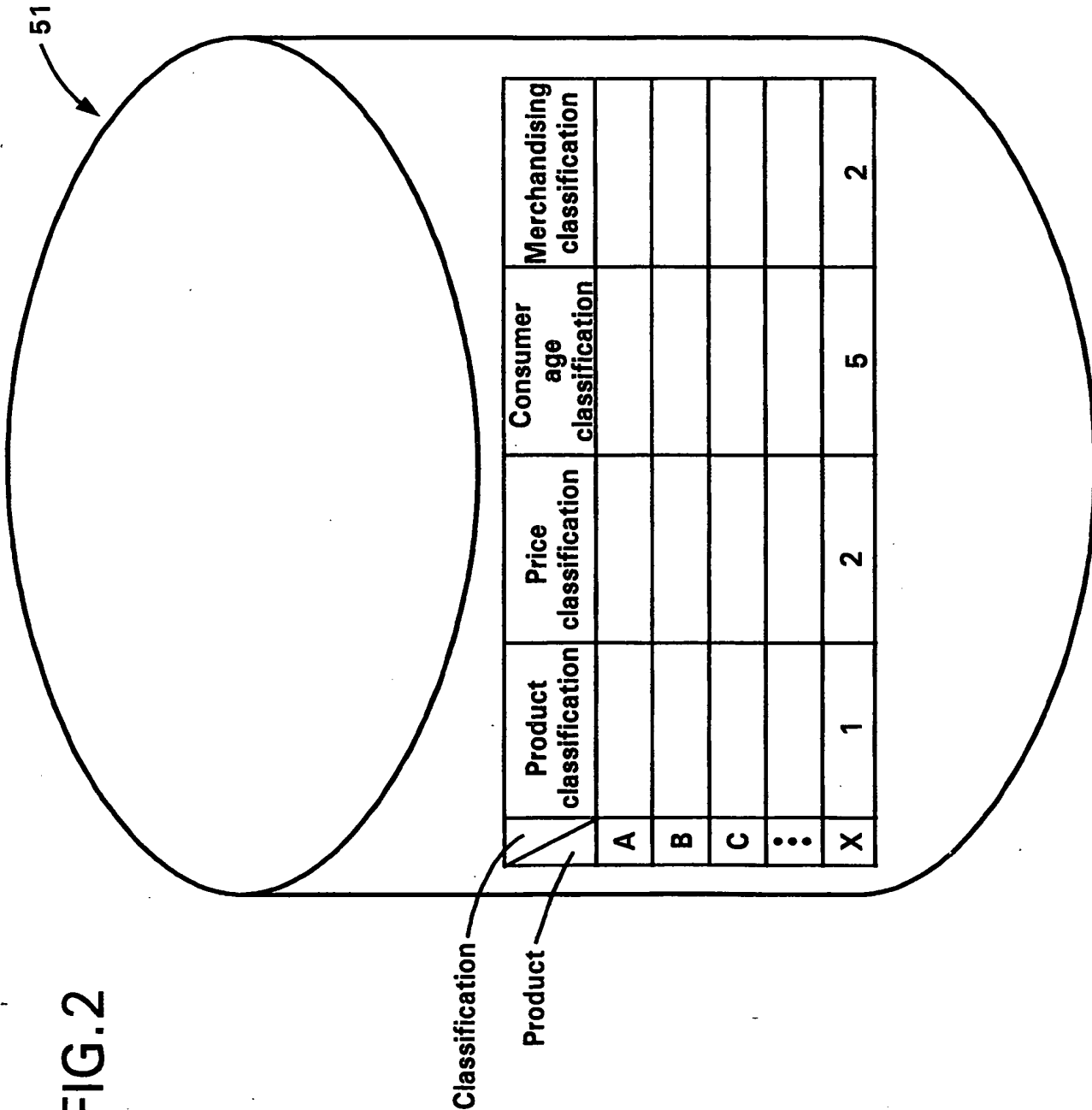


FIG.3

Product classification	Foundation cosmetic	Make up cosmetic	Shampoo & rinse	Perfume & cologne	Cosmetic sundry	Men's cosmetic
1		2	3	4	5	6

Price classification	Low	Medium low	Medium	Medium high	High
1		2	3	4	5

Consumer age classification	Low	Intermediate between low and average	Average	Intermediate between average and high	High
1		2	3	4	5

Merchandising classification	Display sale	Rather display sale	Equivocal	Rather counseling sale	Counseling sale
1		2	3	4	5

FIG.4A

52a

Sample outlet	Relative sales
S ₁	d ₁
S ₂	d ₂
S ₃	d ₃
•	•
•	•
•	•

Relative sale

FIG.4B

52b

Sample outlet	1	2	---	6
S ₁	a ₁	b ₁	---	f ₁
S ₂	a ₂	b ₂	---	f ₂
S ₃	a ₃	b ₃	---	f ₃
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

Product characteristic

FIG.4C

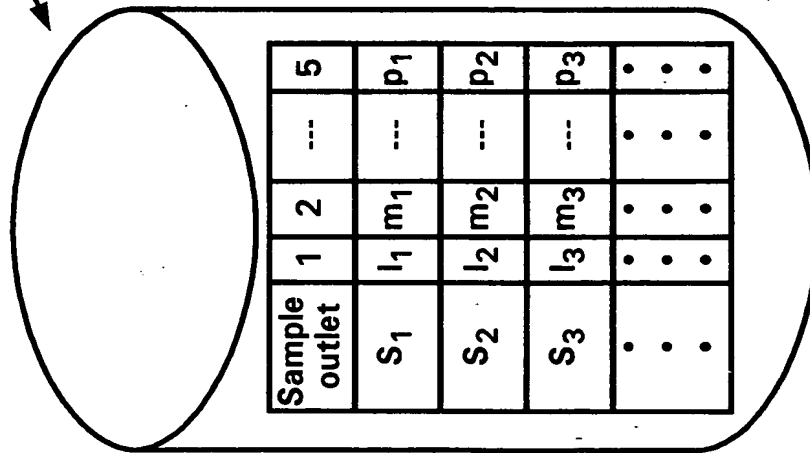
52c

Sample outlet	1	2	---	5
S ₁	g ₁	h ₁	---	k ₁
S ₂	g ₂	h ₂	---	k ₂
S ₃	g ₃	h ₃	---	k ₃
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

Price characteristic

FIG. 4D

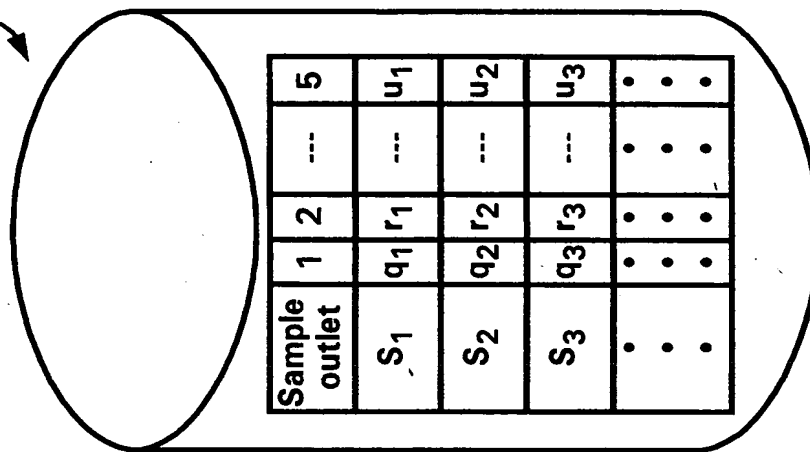
52d



Consumer age characteristic

FIG. 4E

52e



Merchandising characteristic

FIG. 7

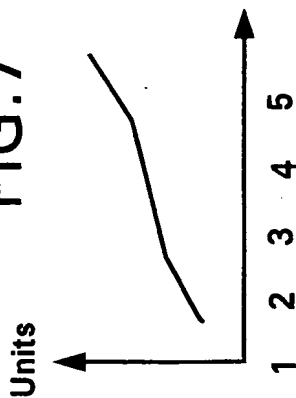


FIG. 5A

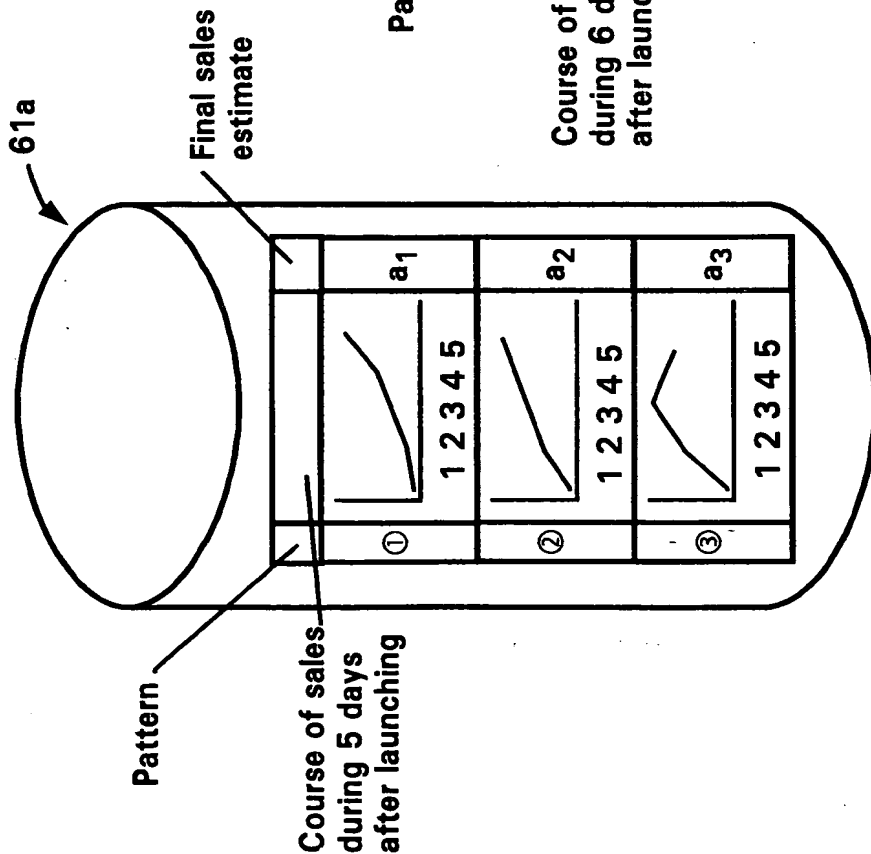


FIG. 5B

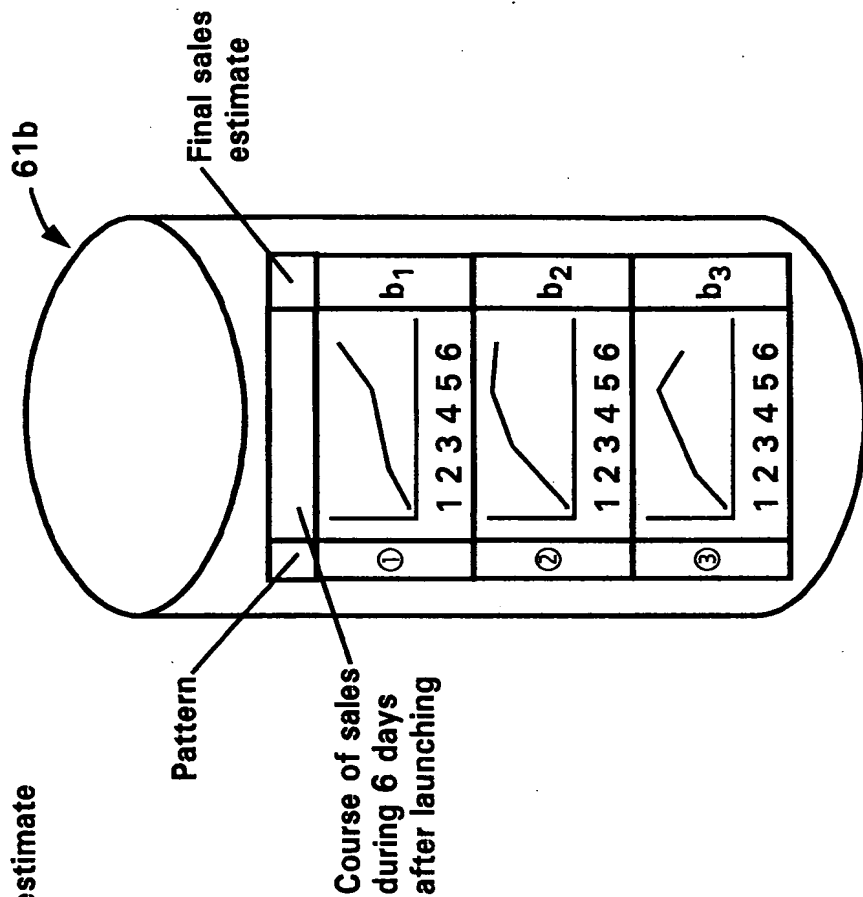


FIG.6

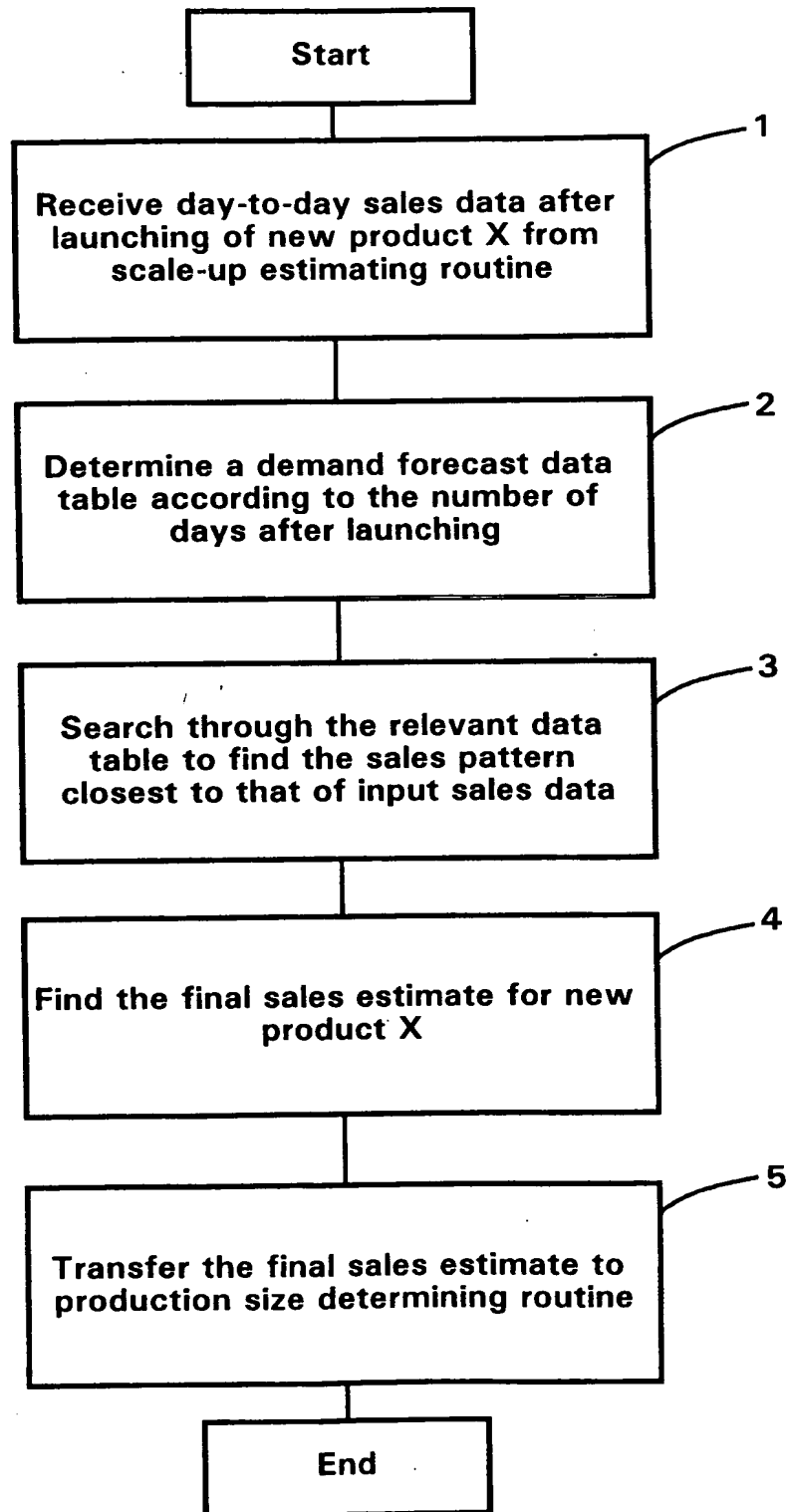


FIG. 8

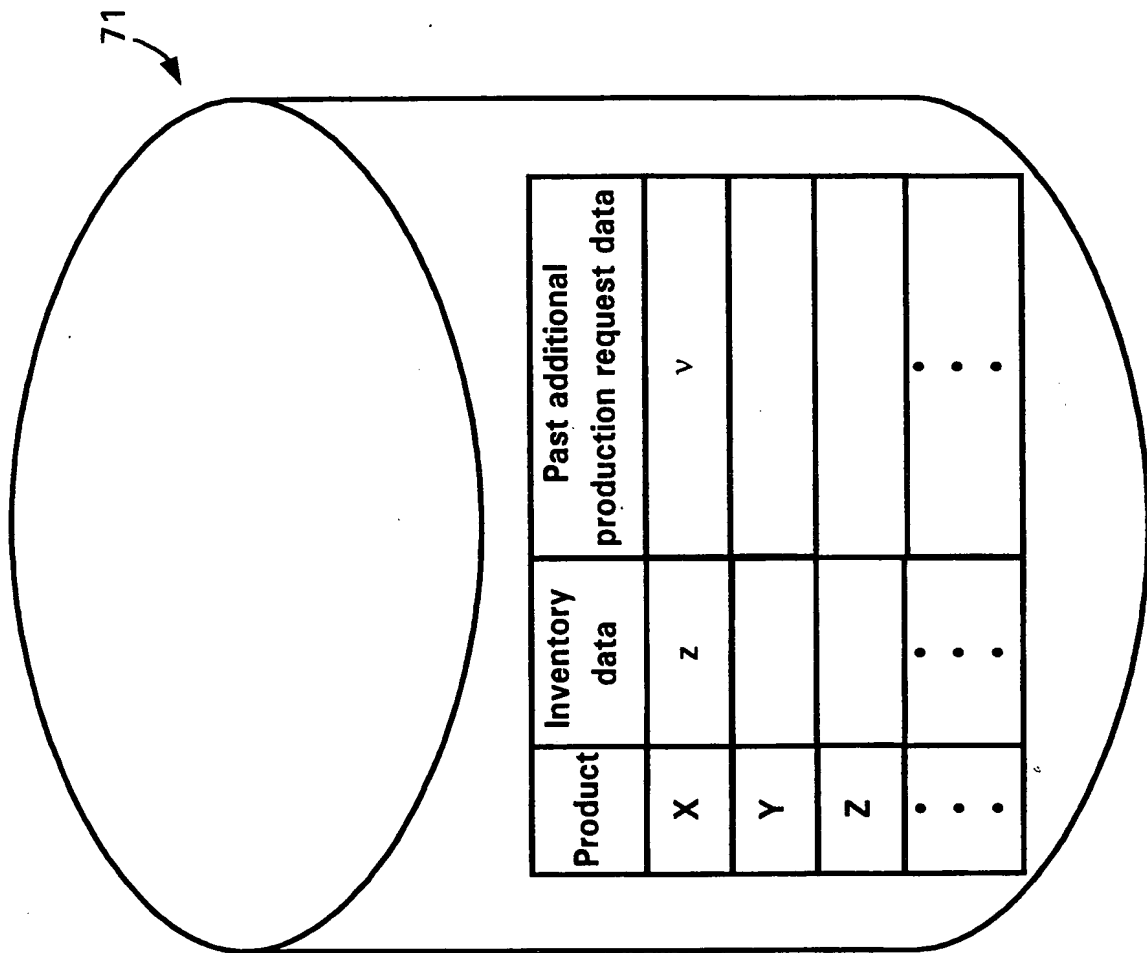


FIG.9

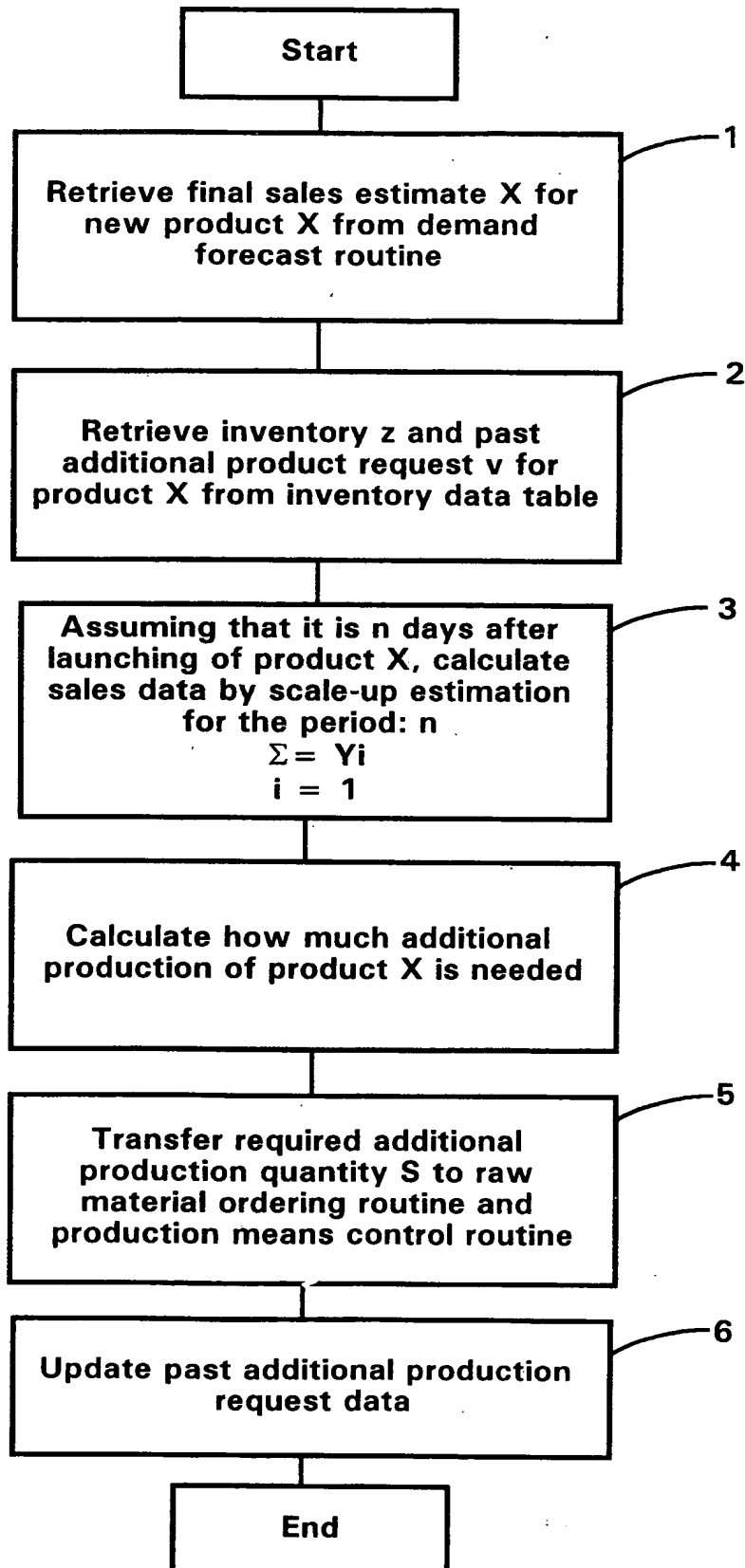


FIG. 10A

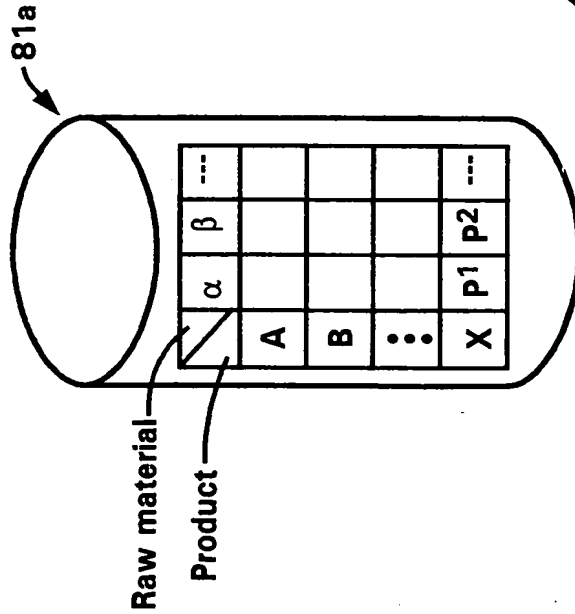


FIG. 10B

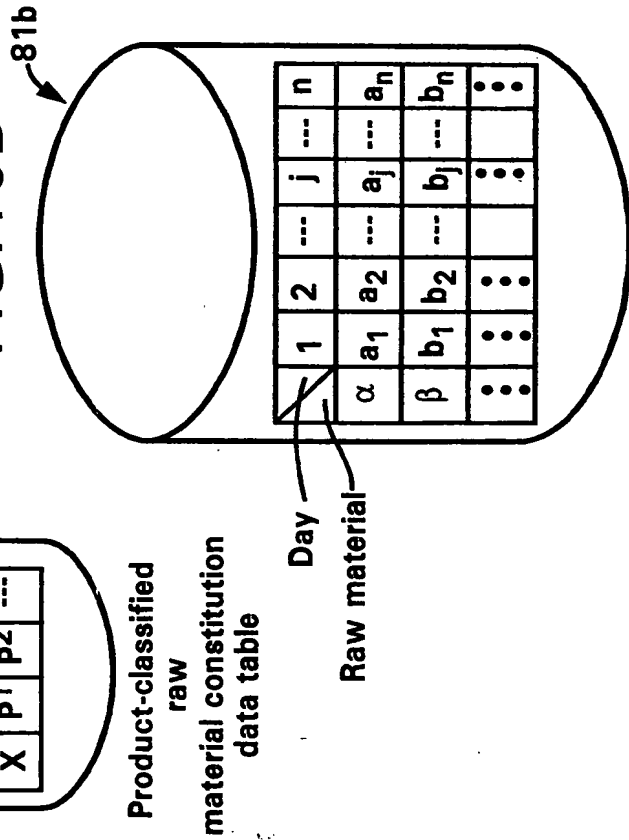


FIG. 10C

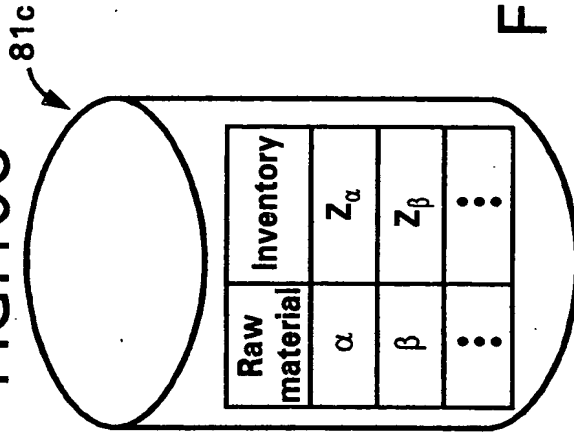


FIG. 10D

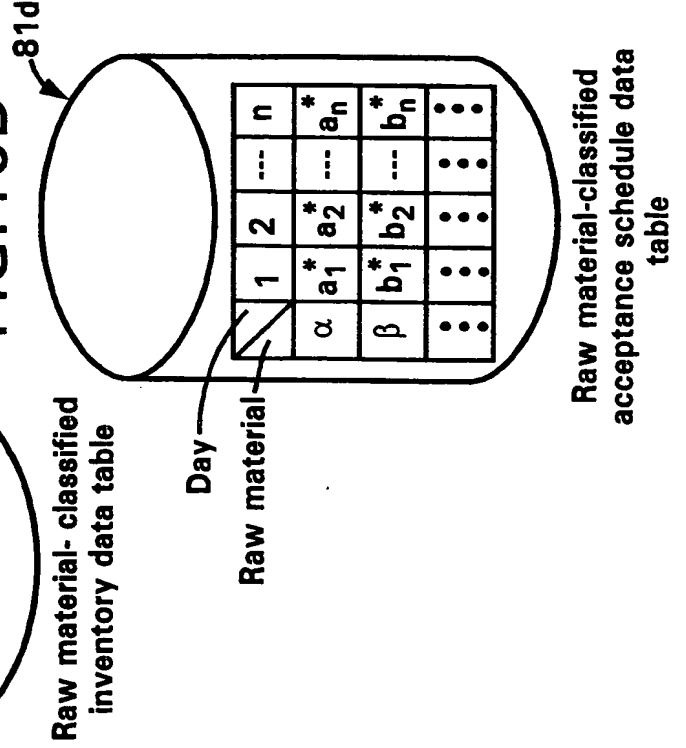


FIG. 11

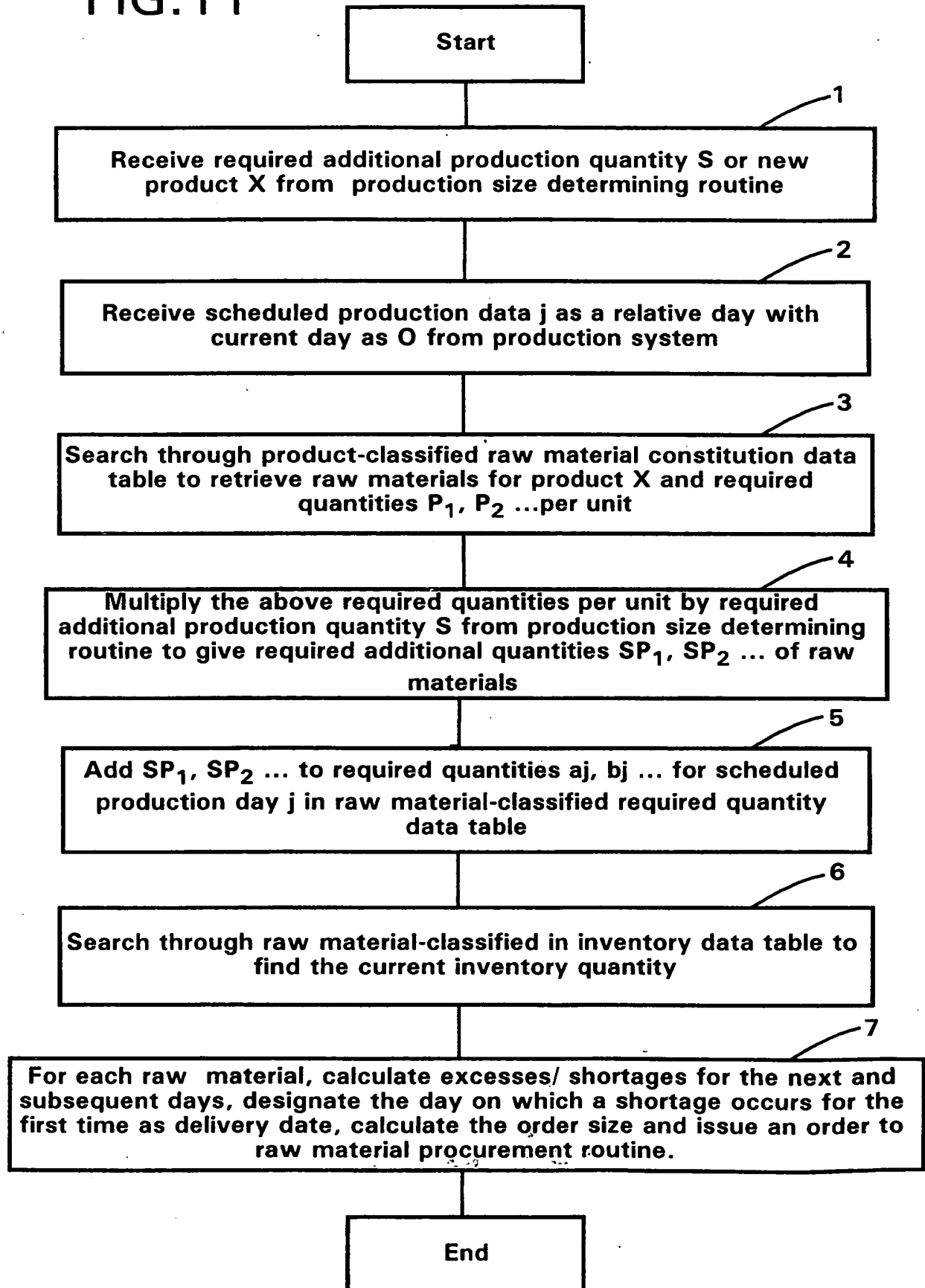


FIG.12

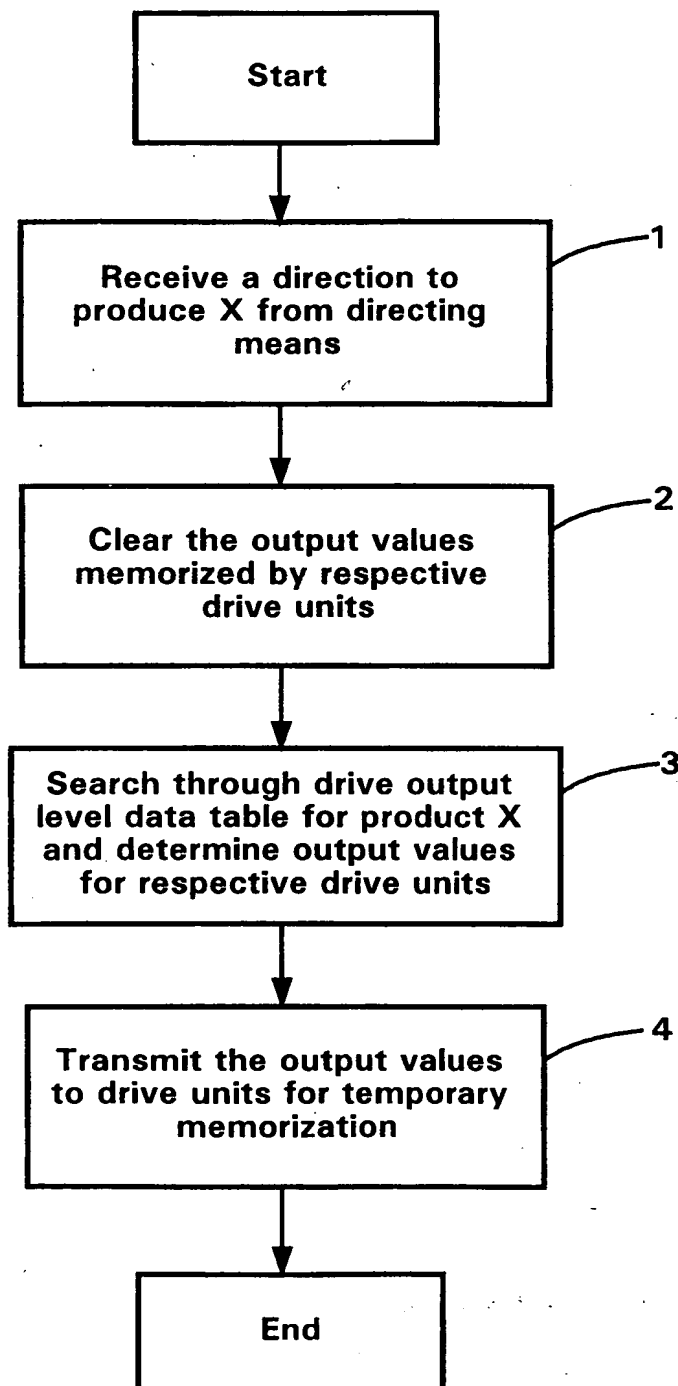


FIG.13

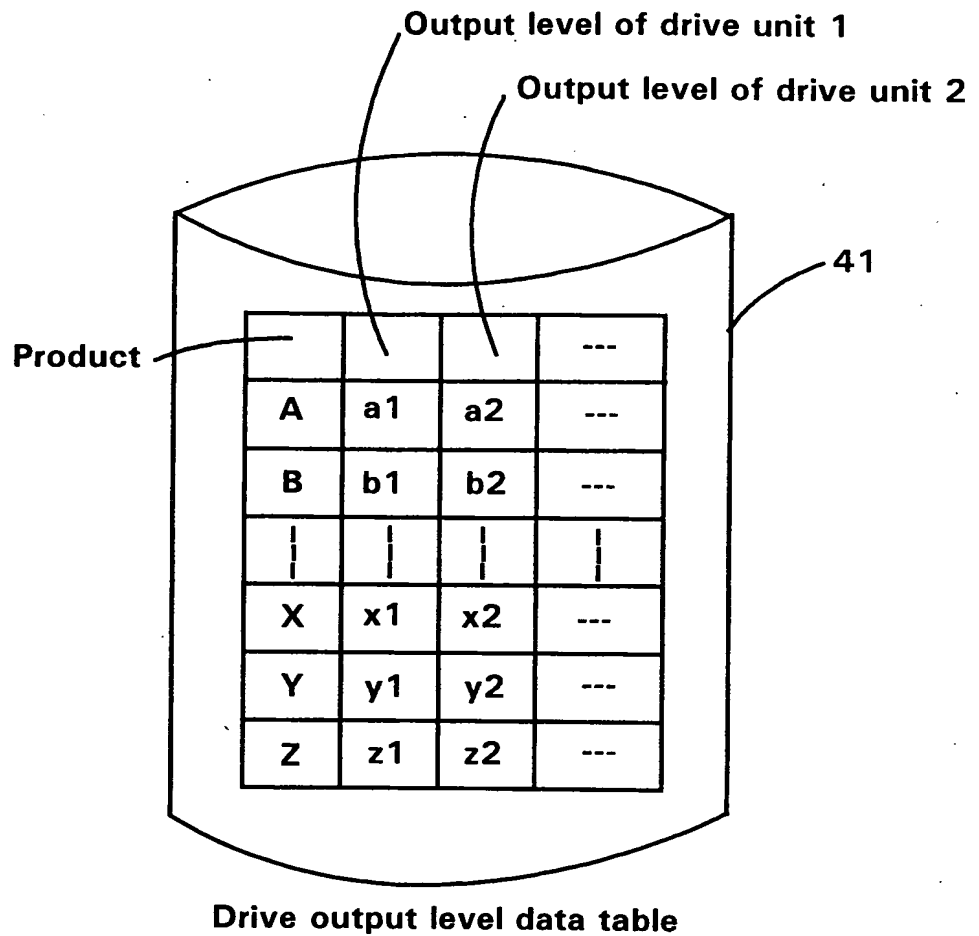


FIG.14

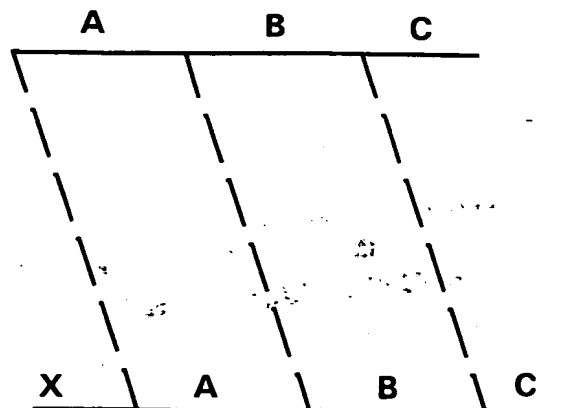


FIG. 15

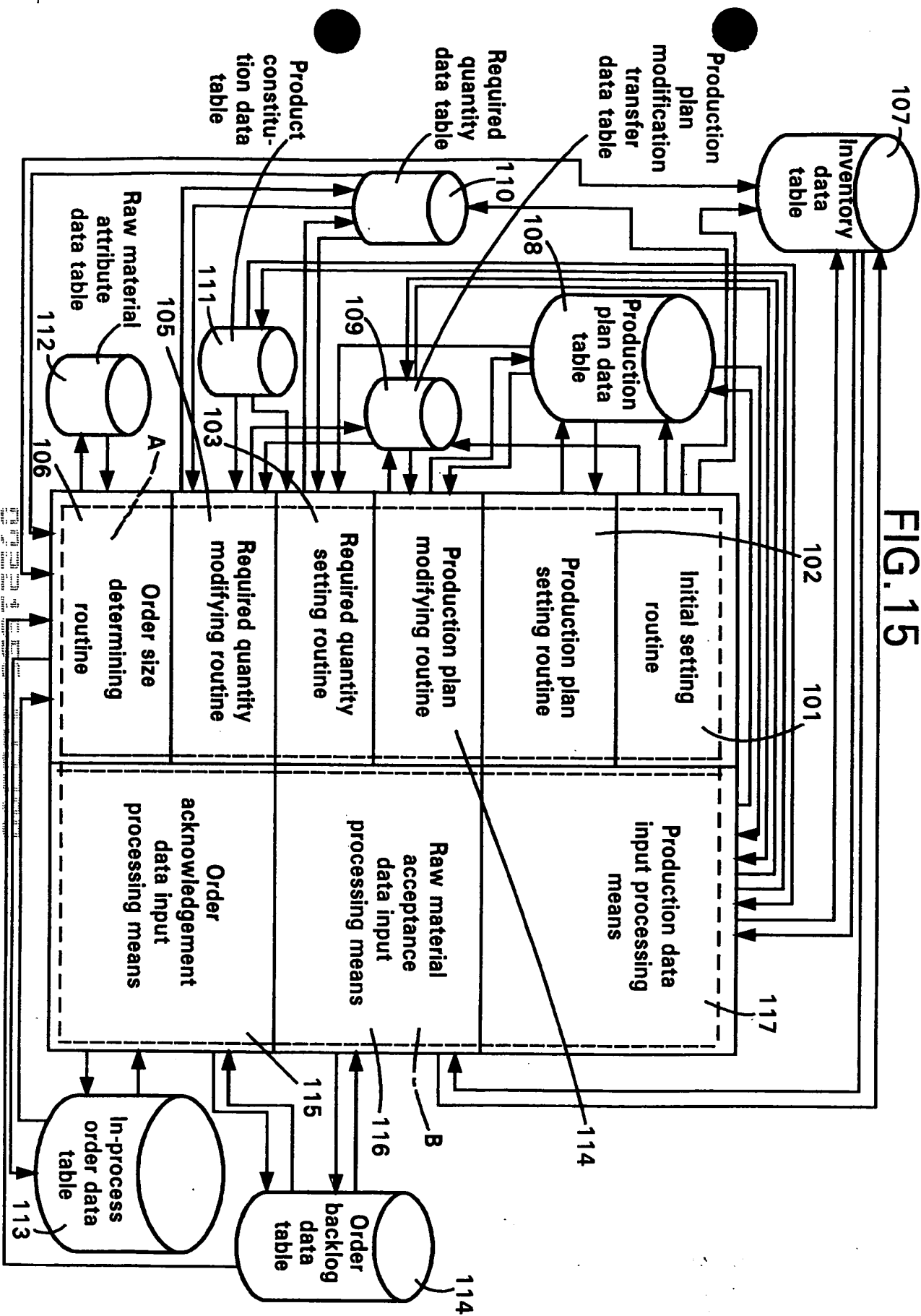


FIG. 16

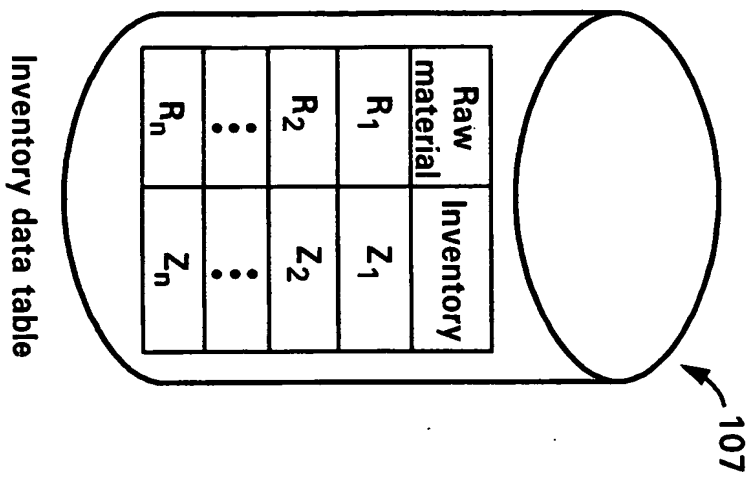
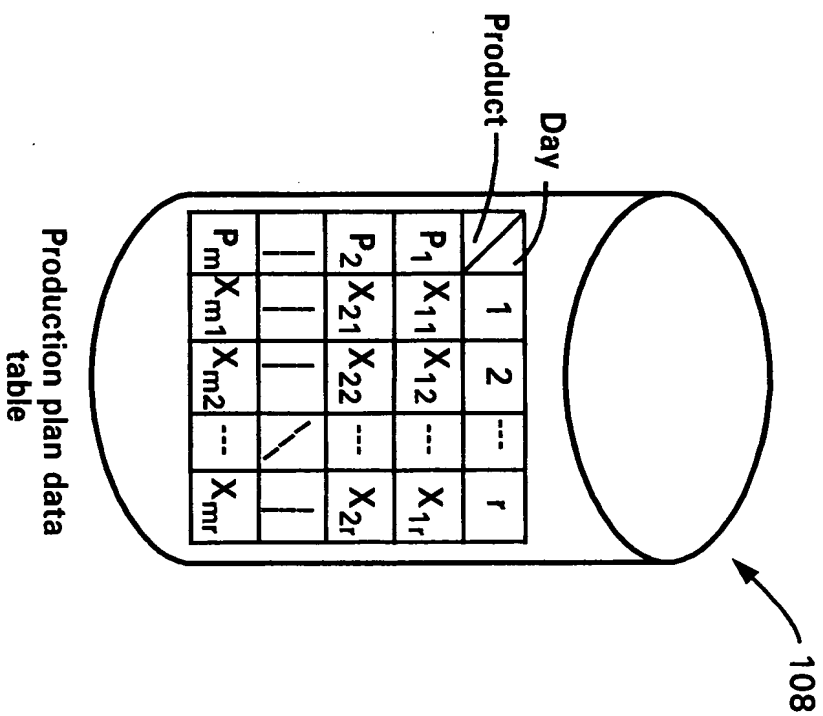
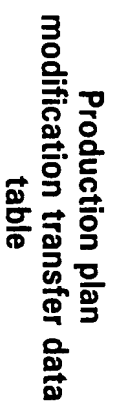


FIG. 17



109



110



FIG.20

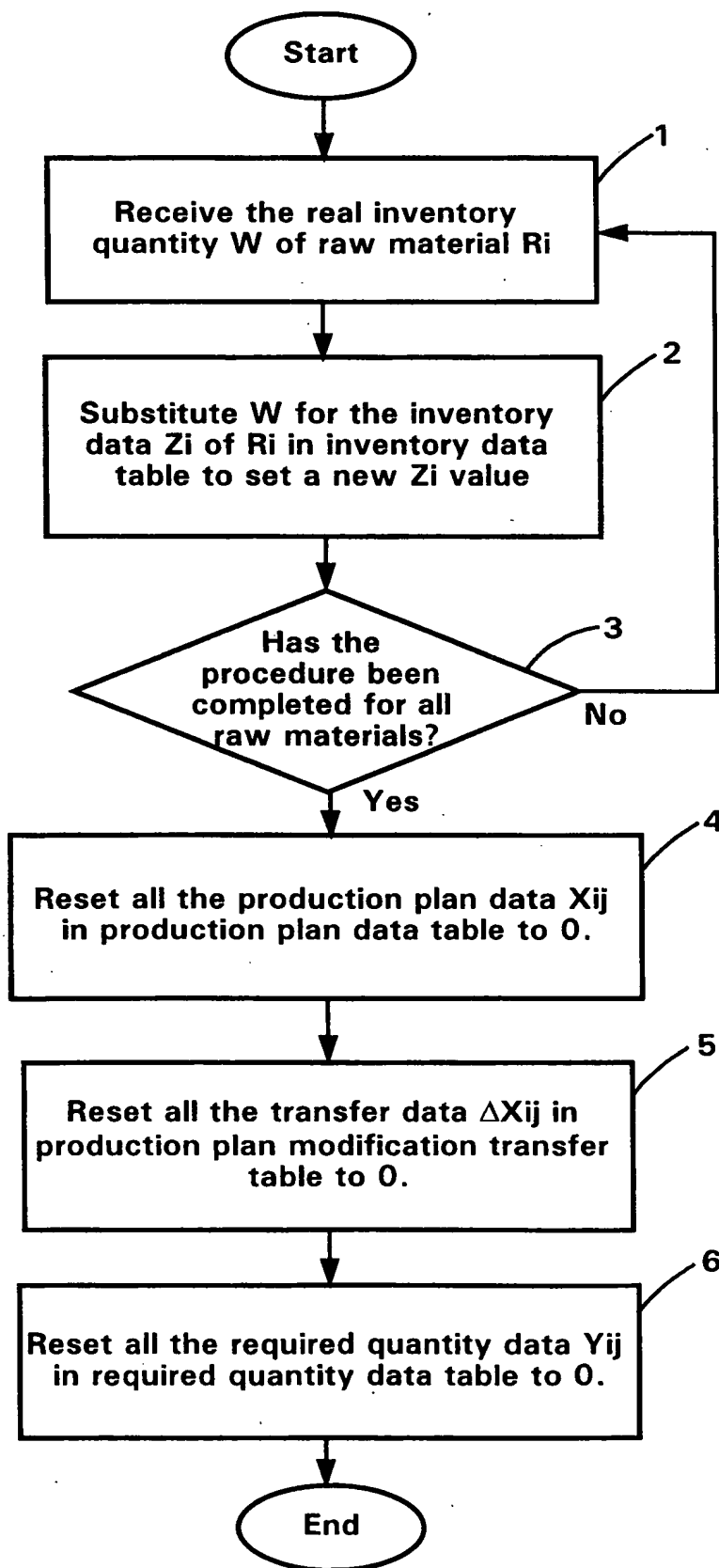


FIG.21

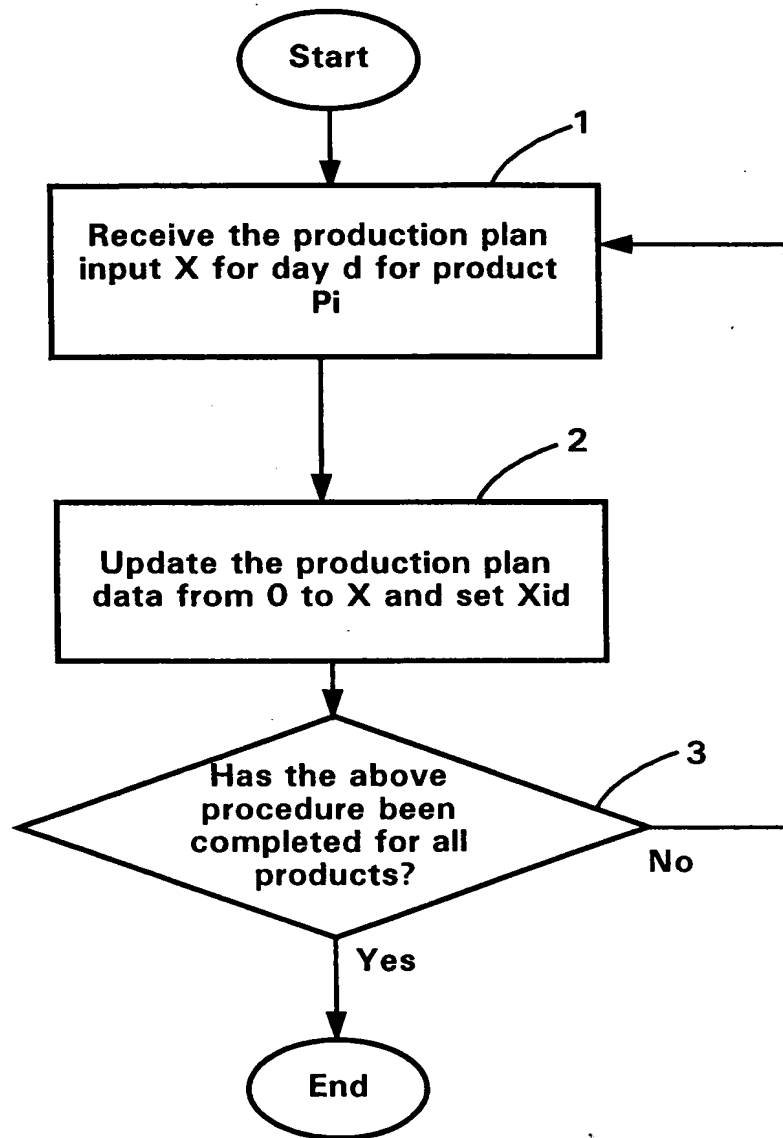


FIG.22

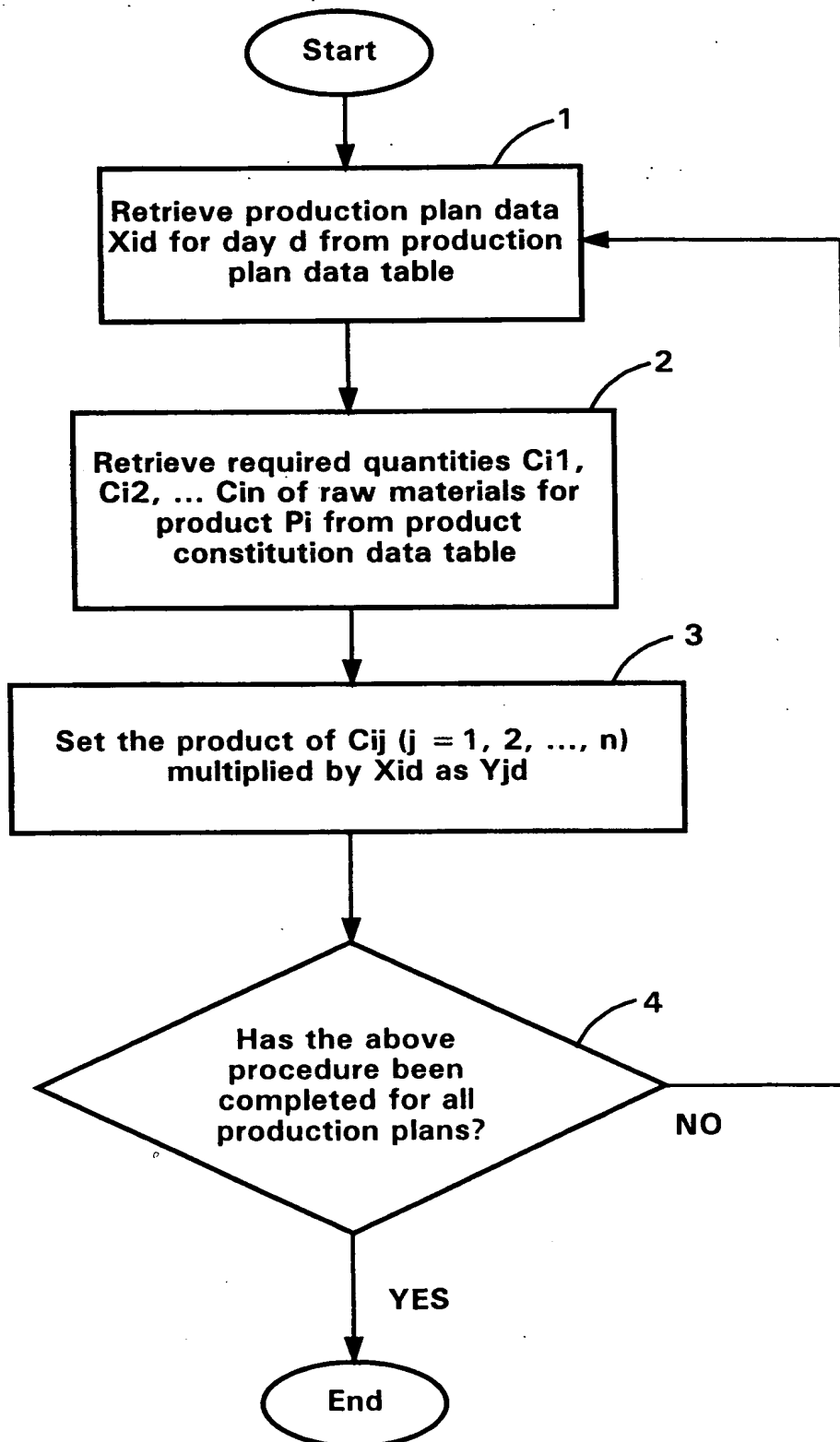


FIG. 23

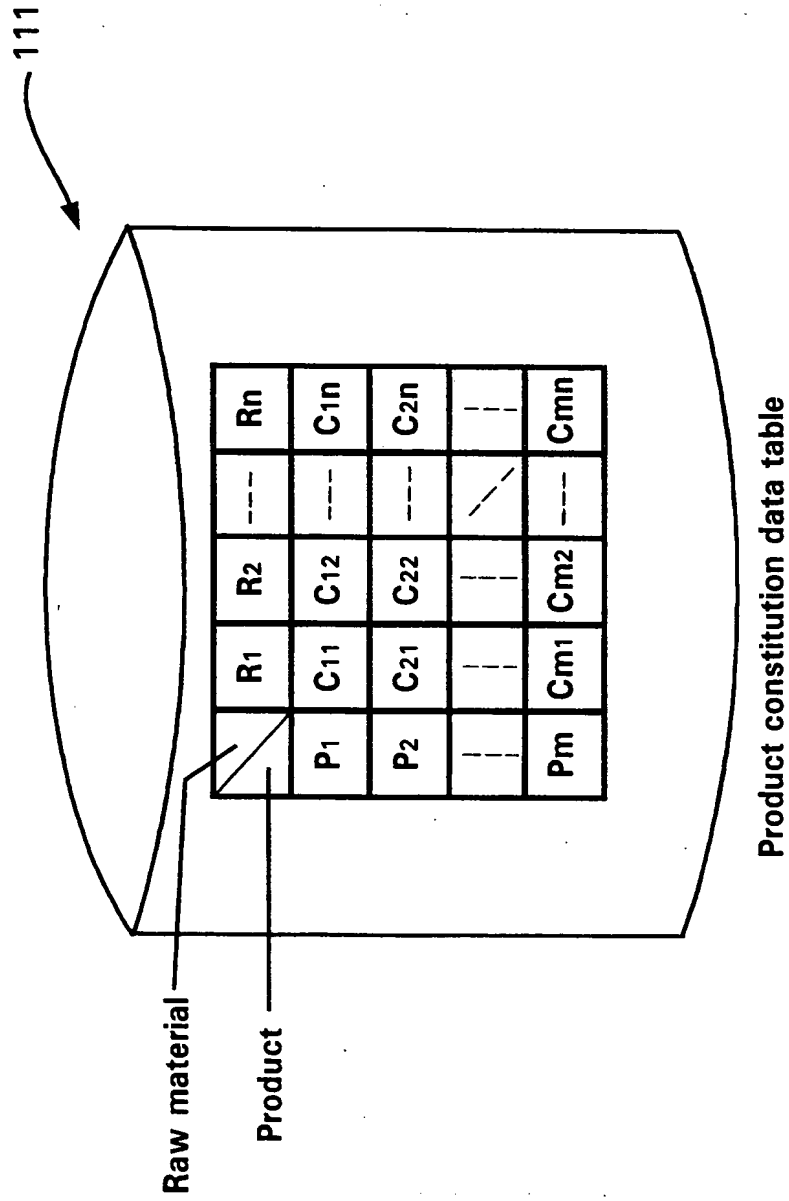


FIG.24

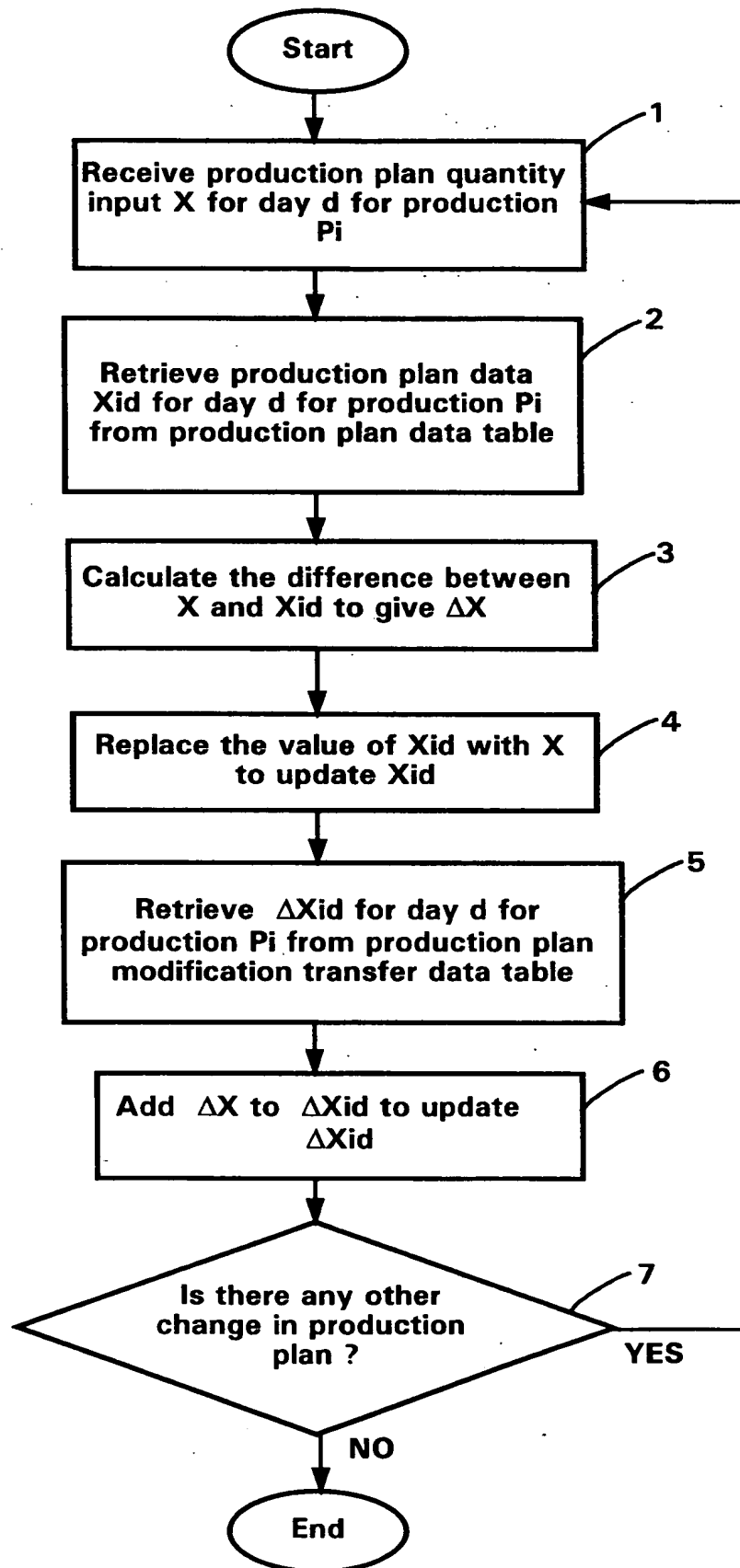


FIG.25

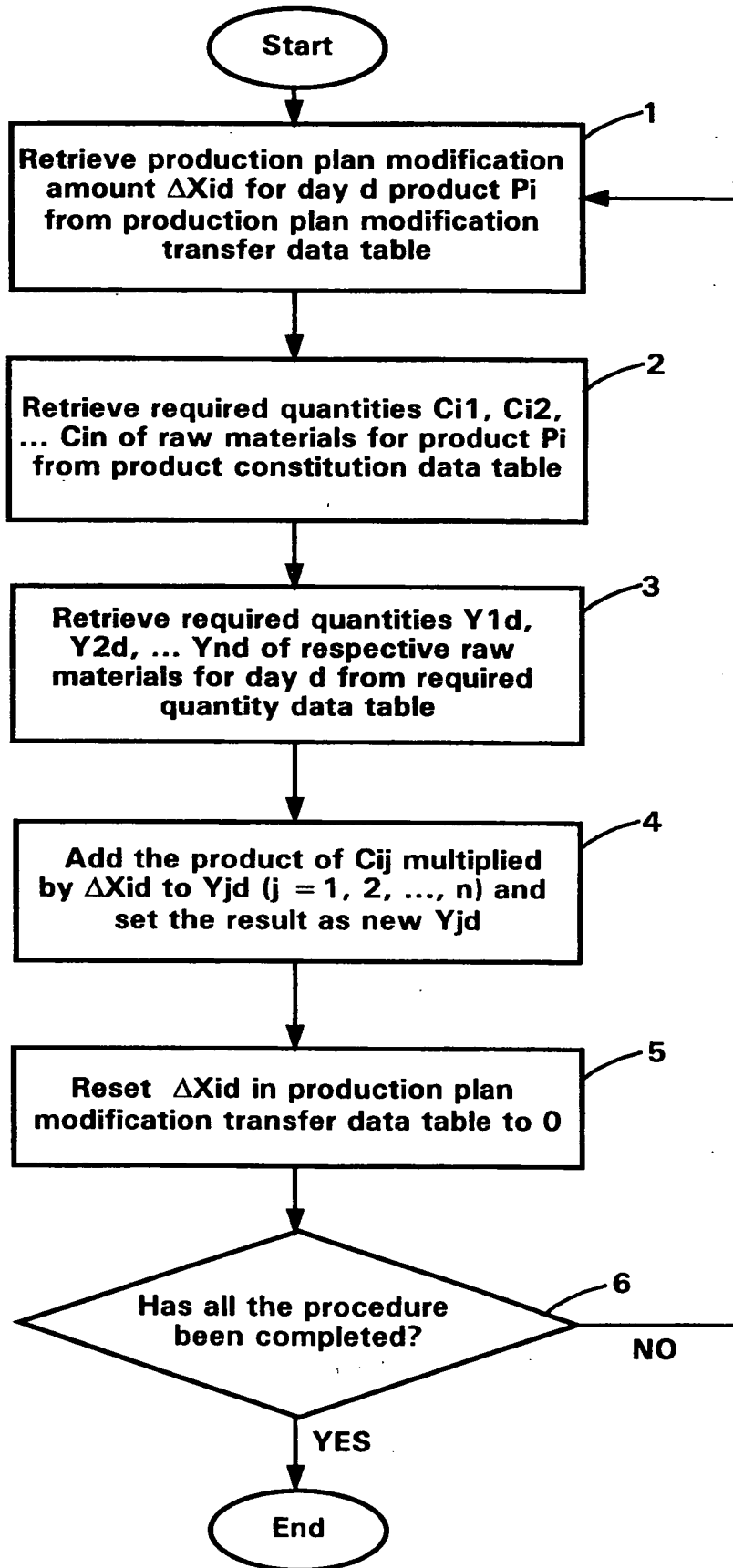


FIG.26A

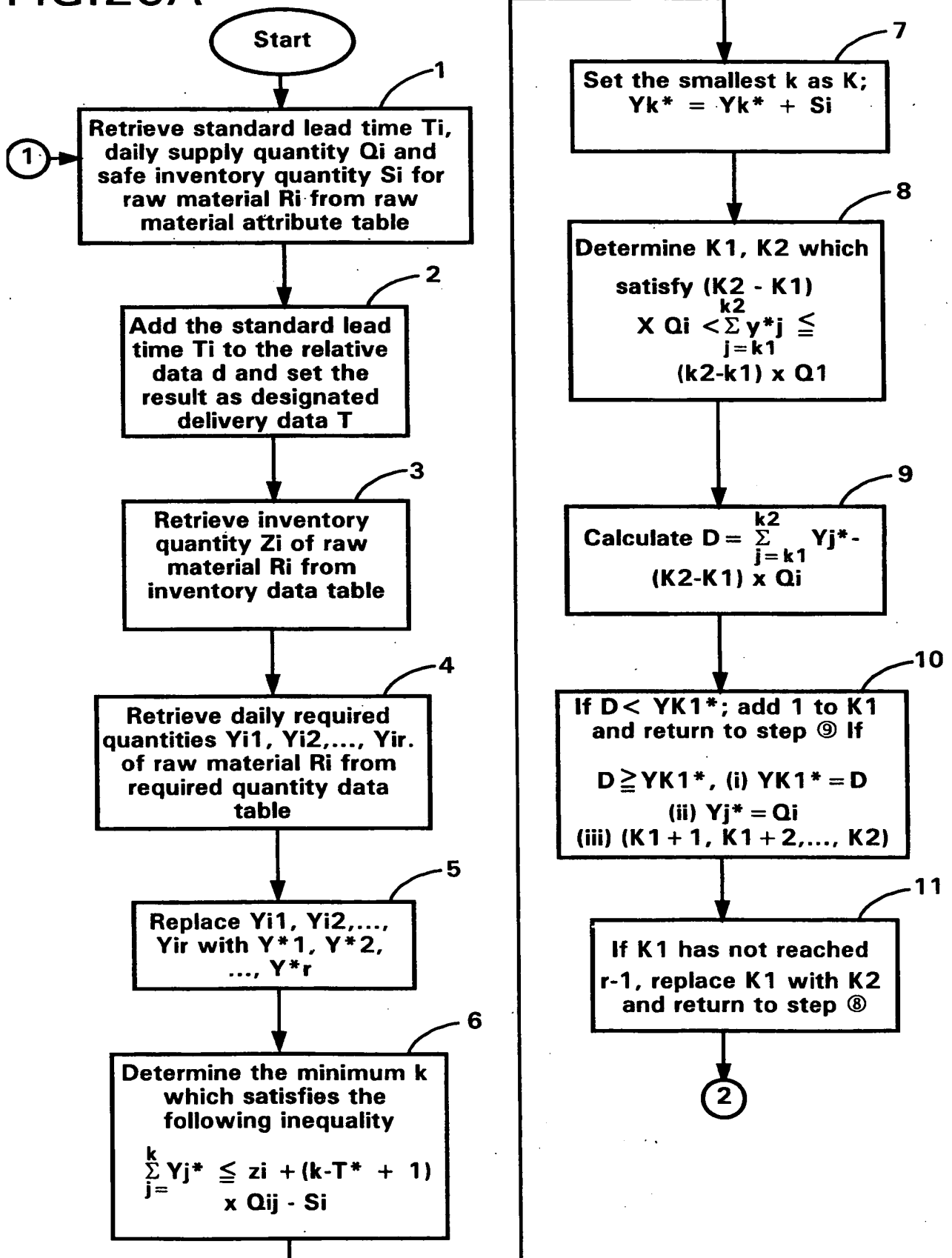
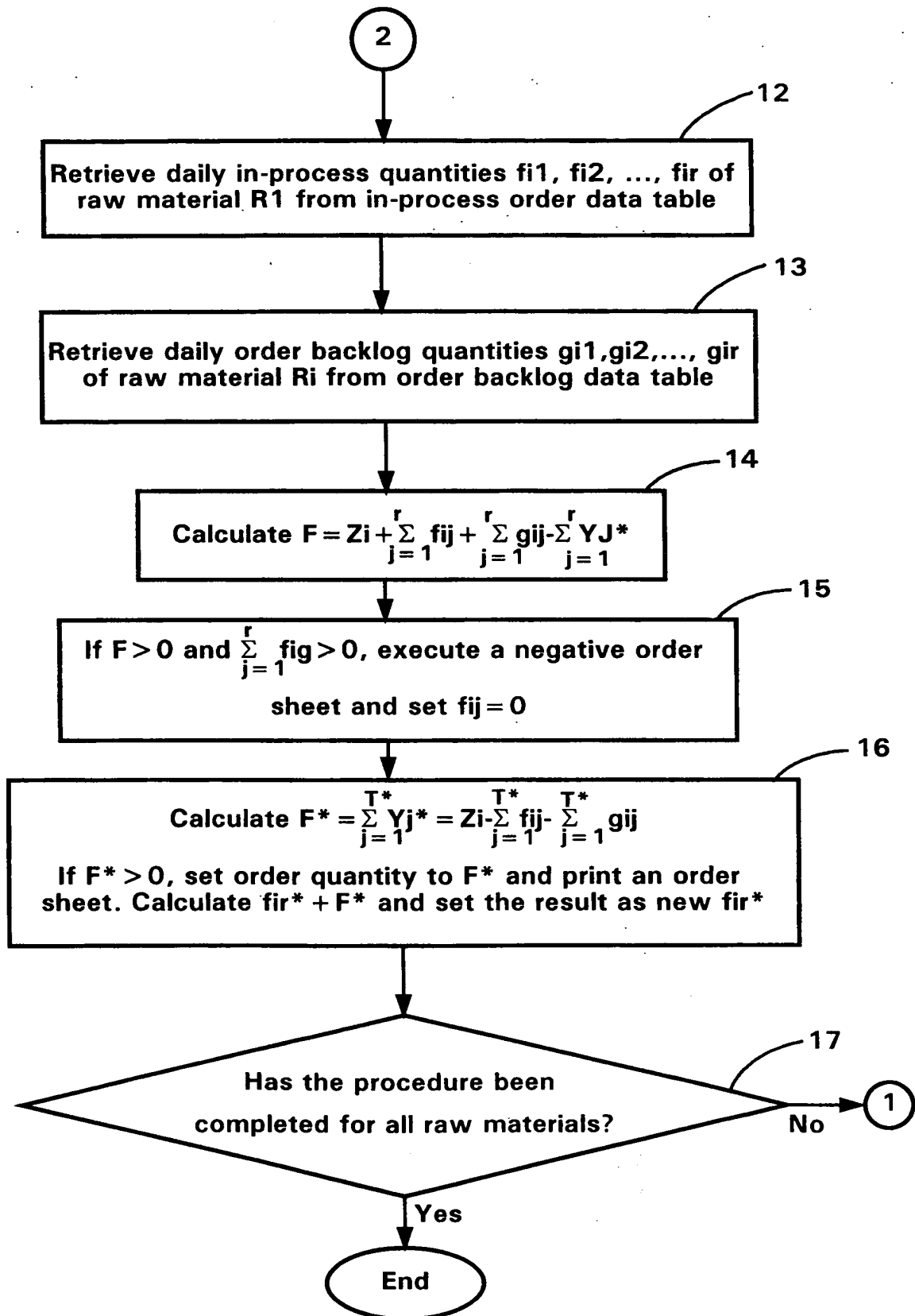


FIG.26B



112

Raw material attribute data table

FIG.28

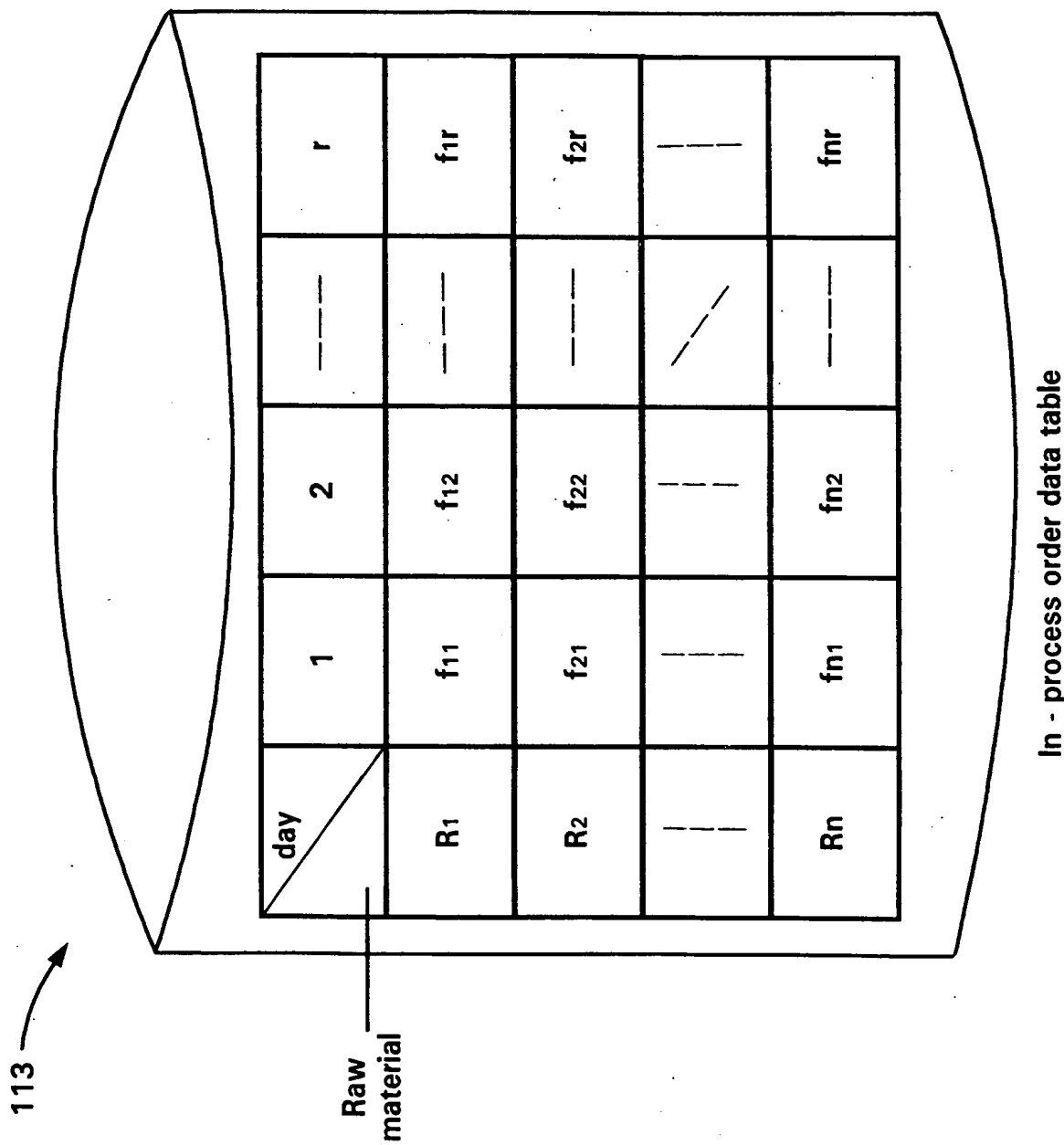


FIG.29

114

Raw material

day	1	2	---	r
R ₁	g ₁₁	g ₁₂	---	g _{1r}
R ₂	g ₂₁	g ₂₂	---	g _{2r}
---	---	---	---	---
R _n	g _{n1}	g _{n2}	---	g _{nr}

Order backlog data table

FIG.30

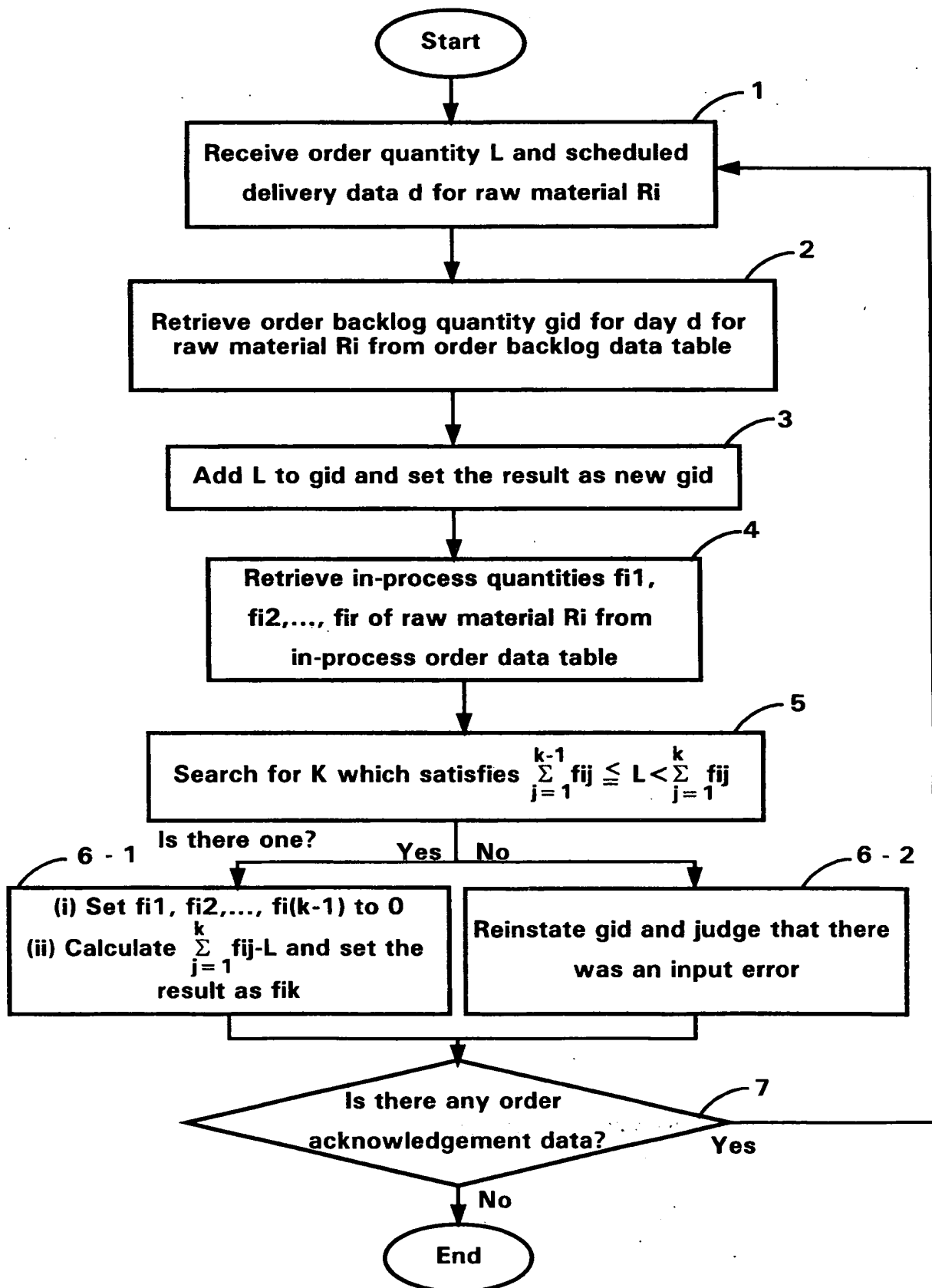


FIG.31

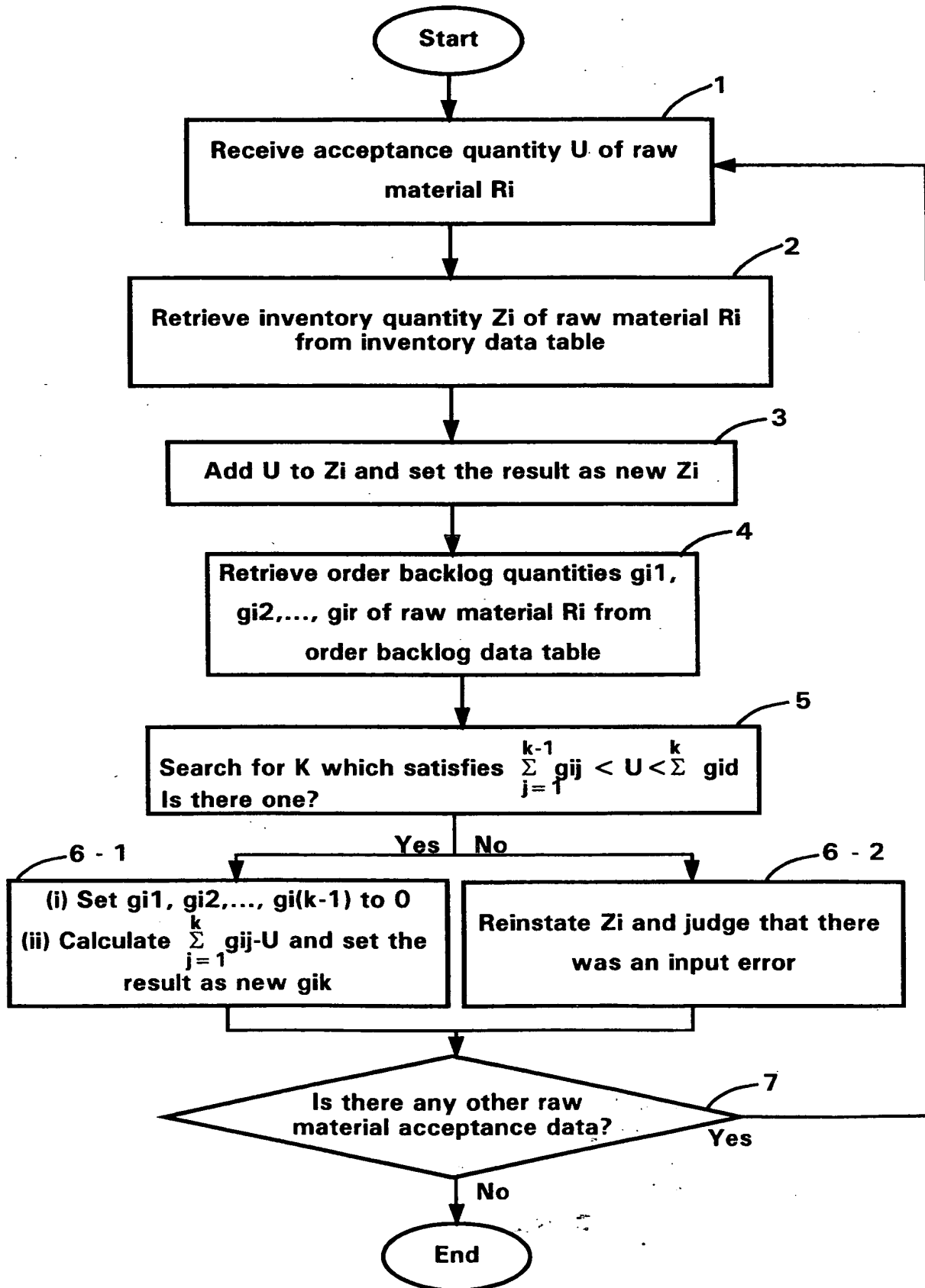
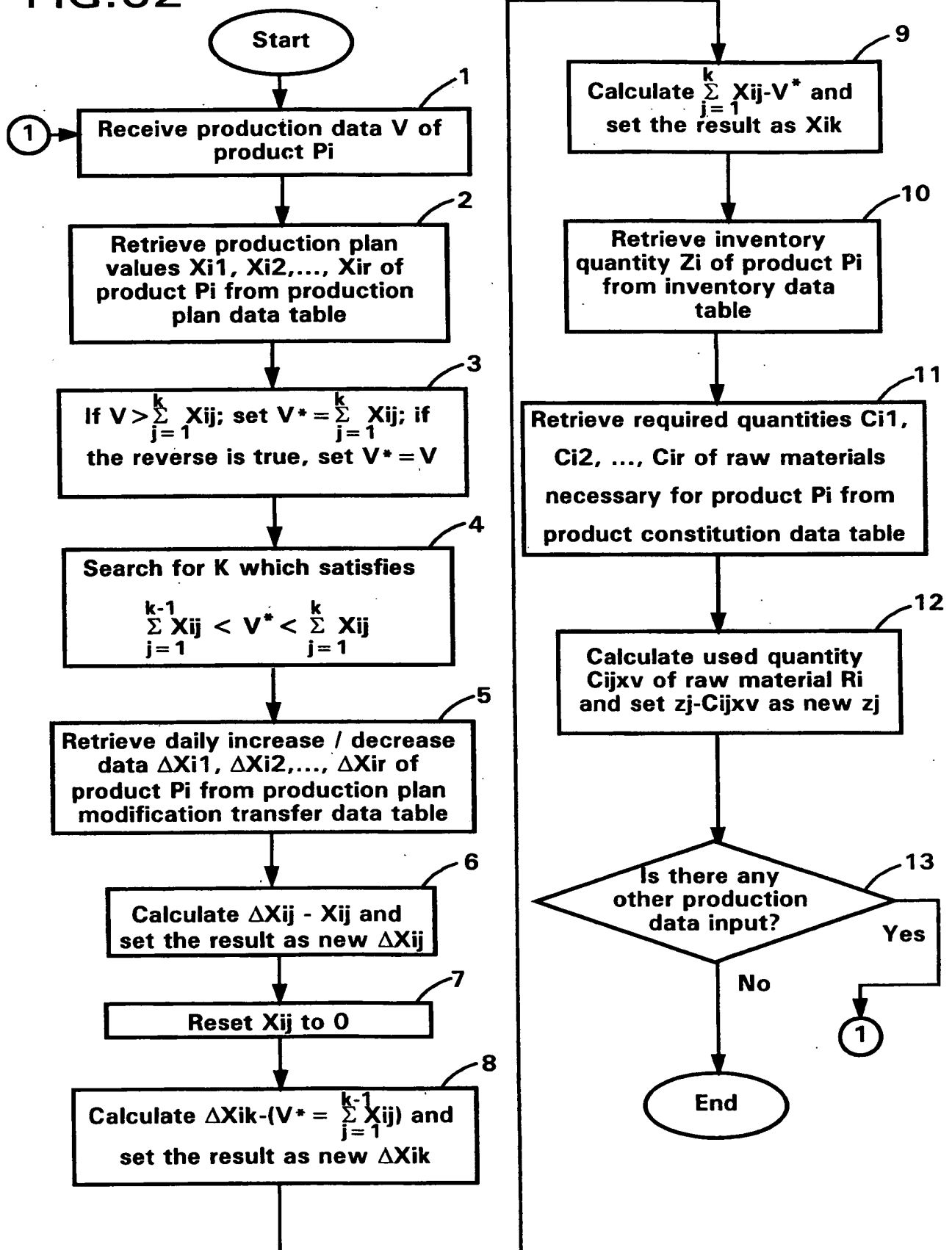


FIG.32



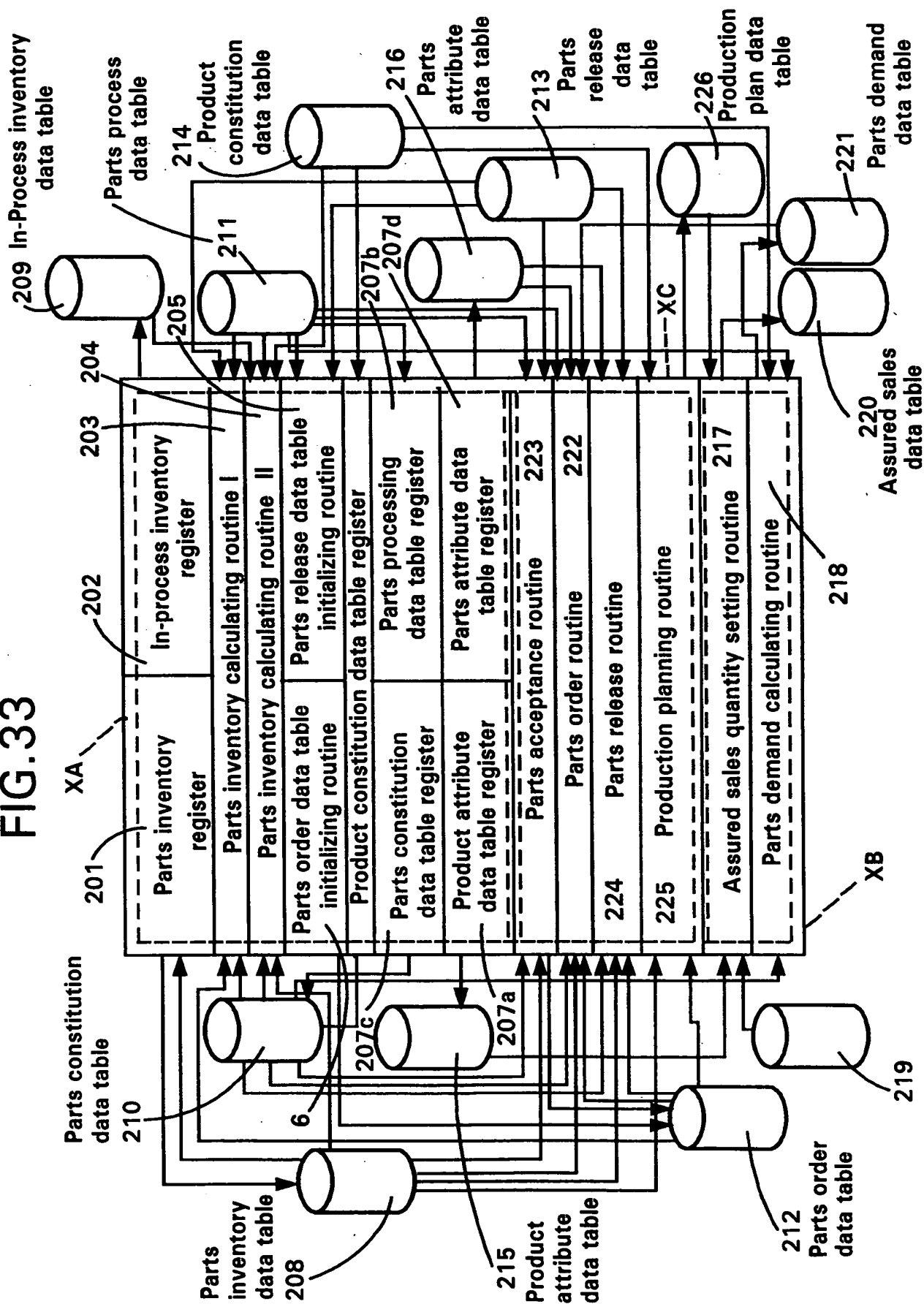
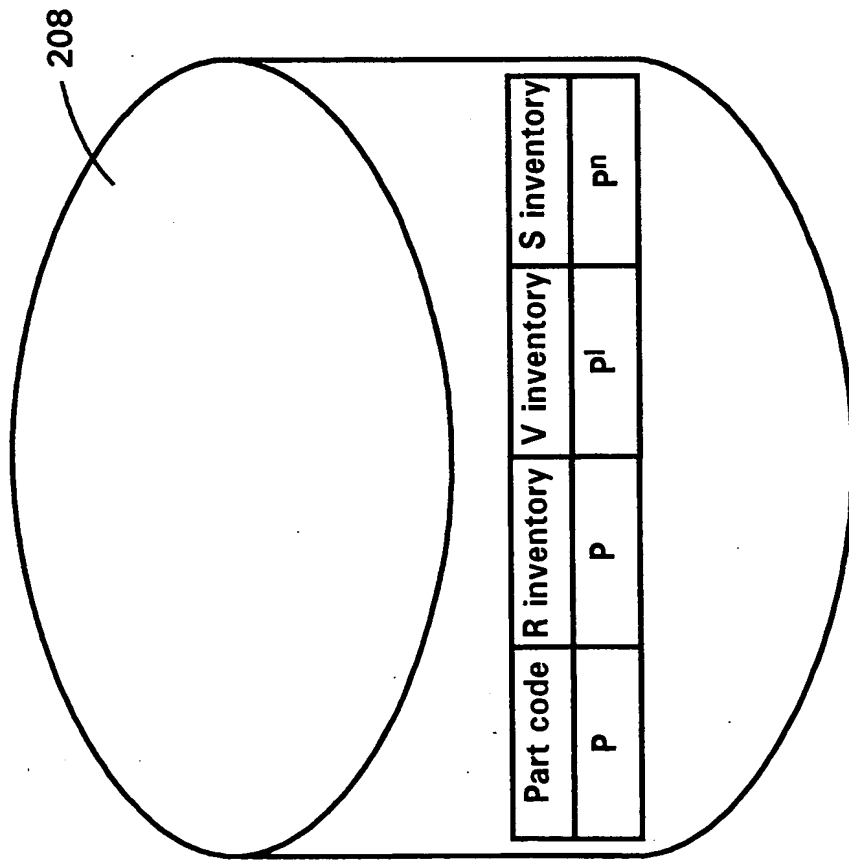
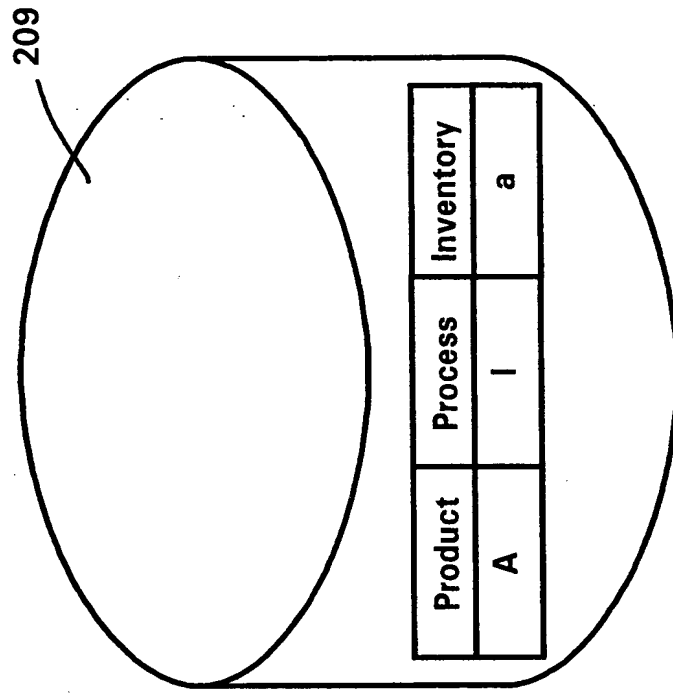


FIG.34



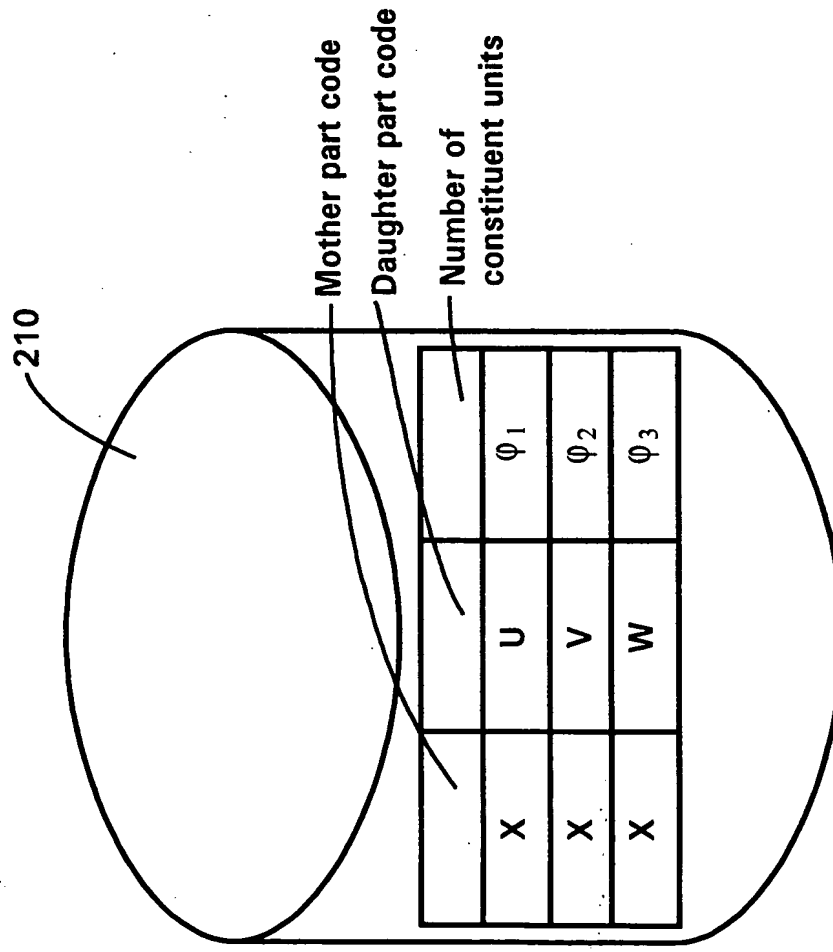
Parts inventory data table

FIG.35



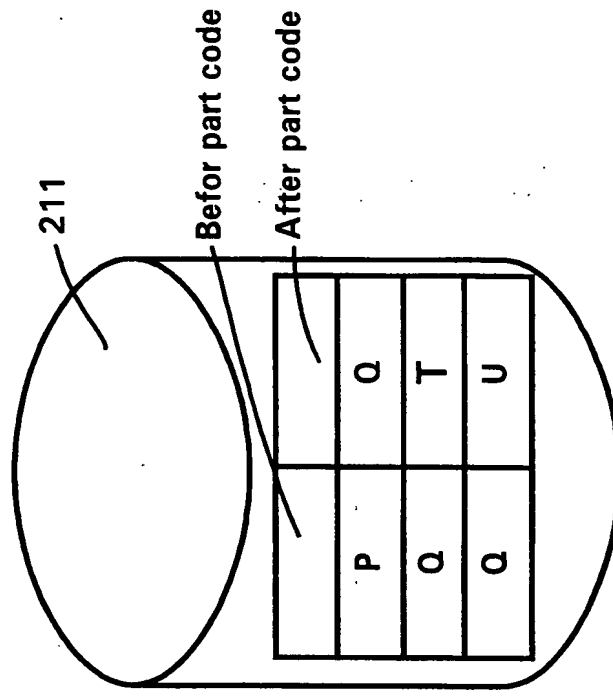
In-process inventory data table

FIG.36



Parts Constitution data table

FIG.37



Parts processing data table

FIG. 38

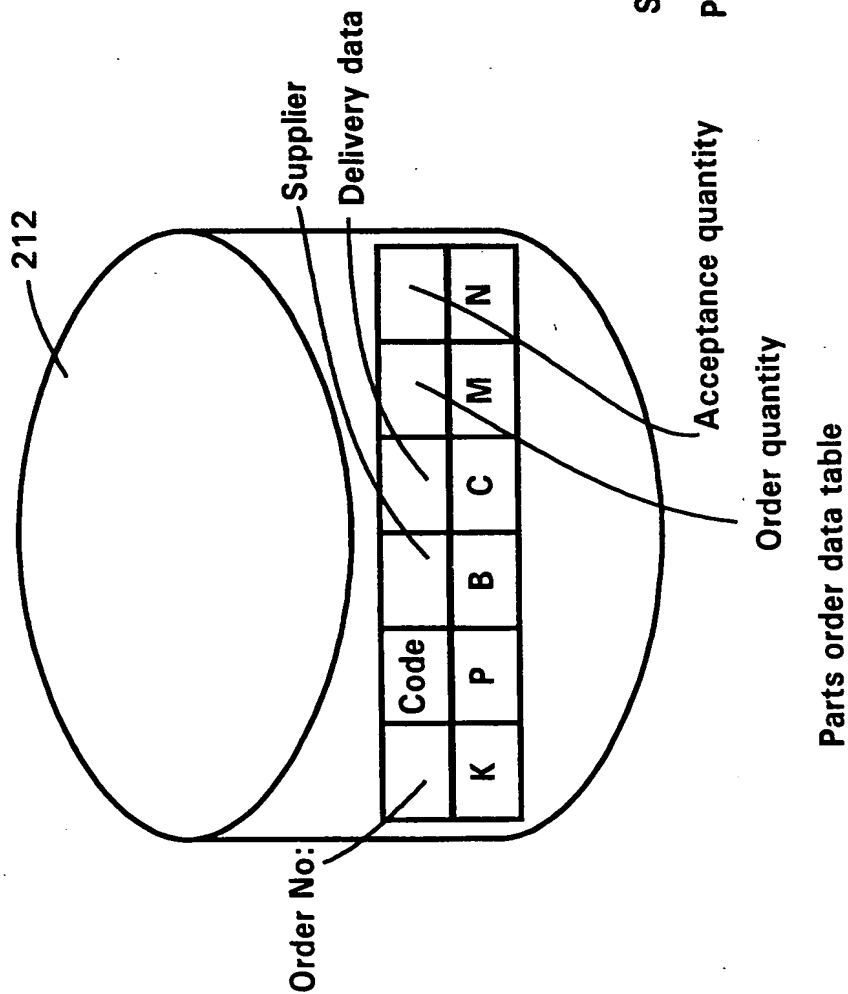
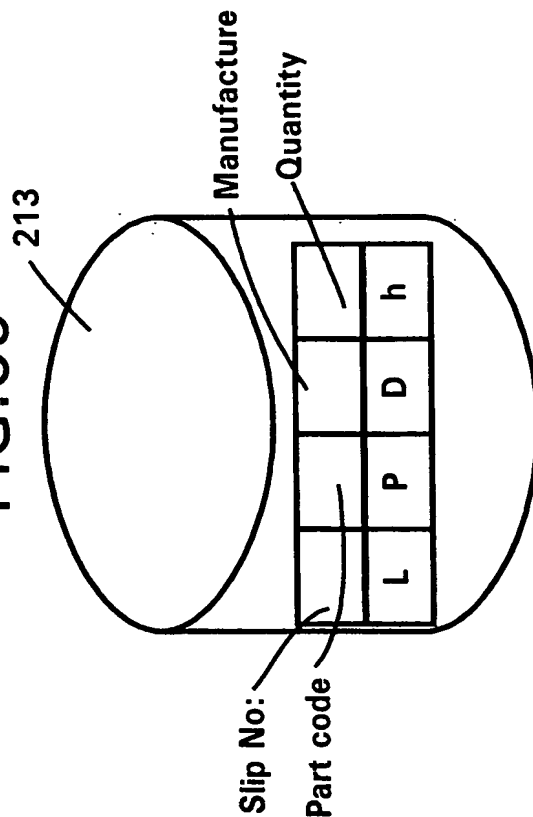


FIG. 39



Parts release data table

Parts order data table

FIG.40

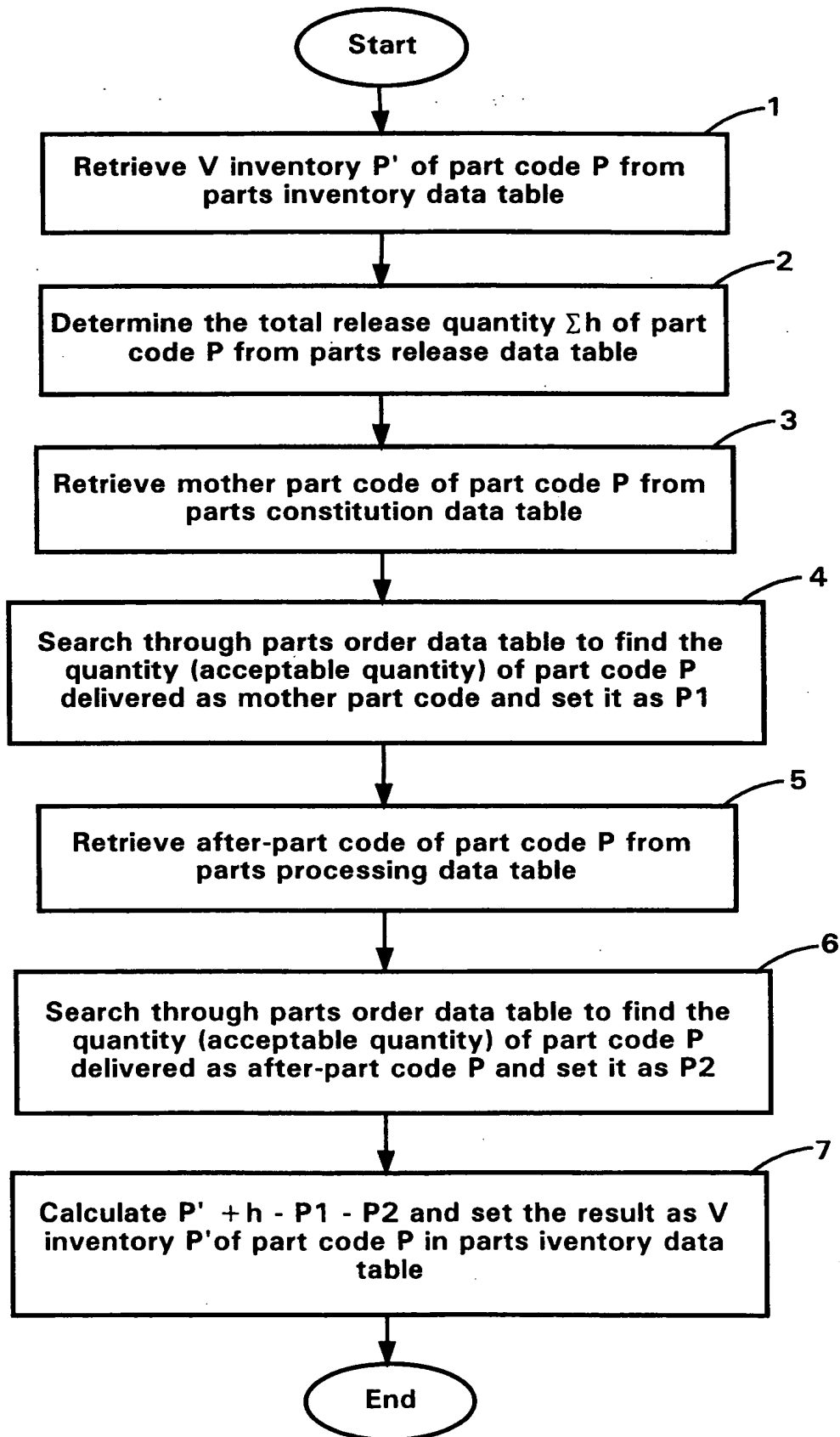


FIG.41

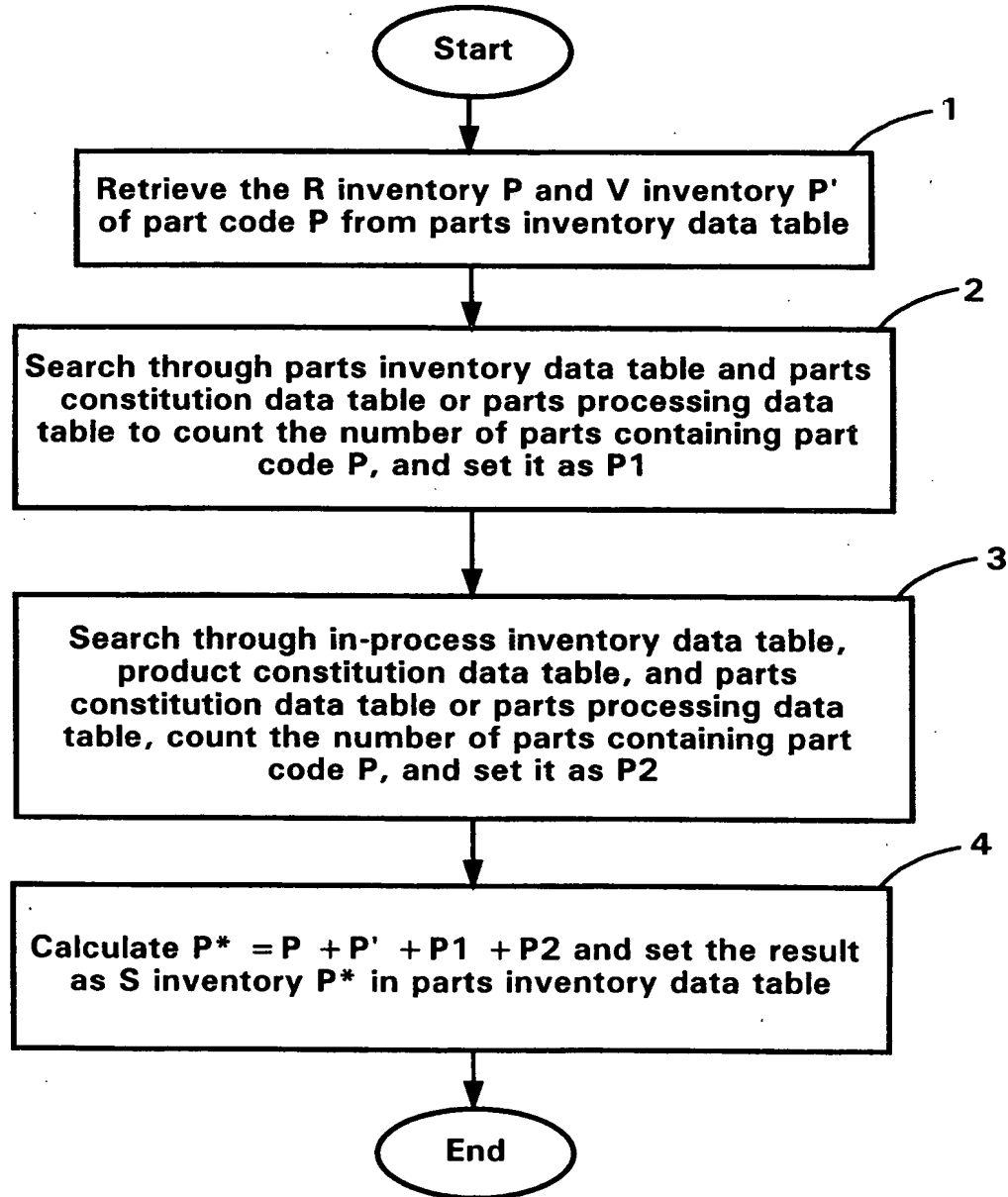


FIG.42

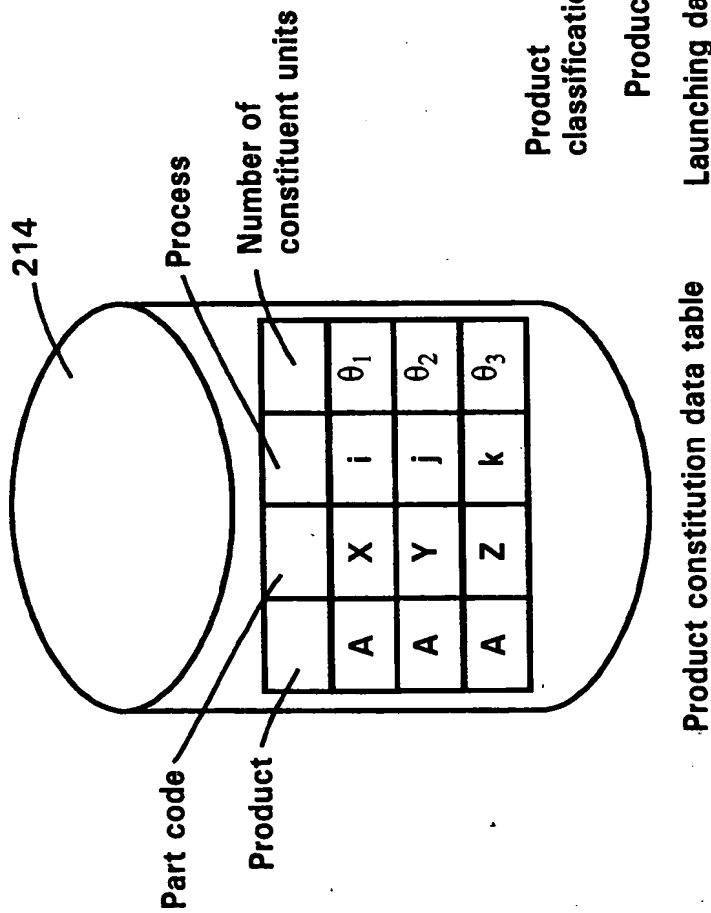


FIG.43

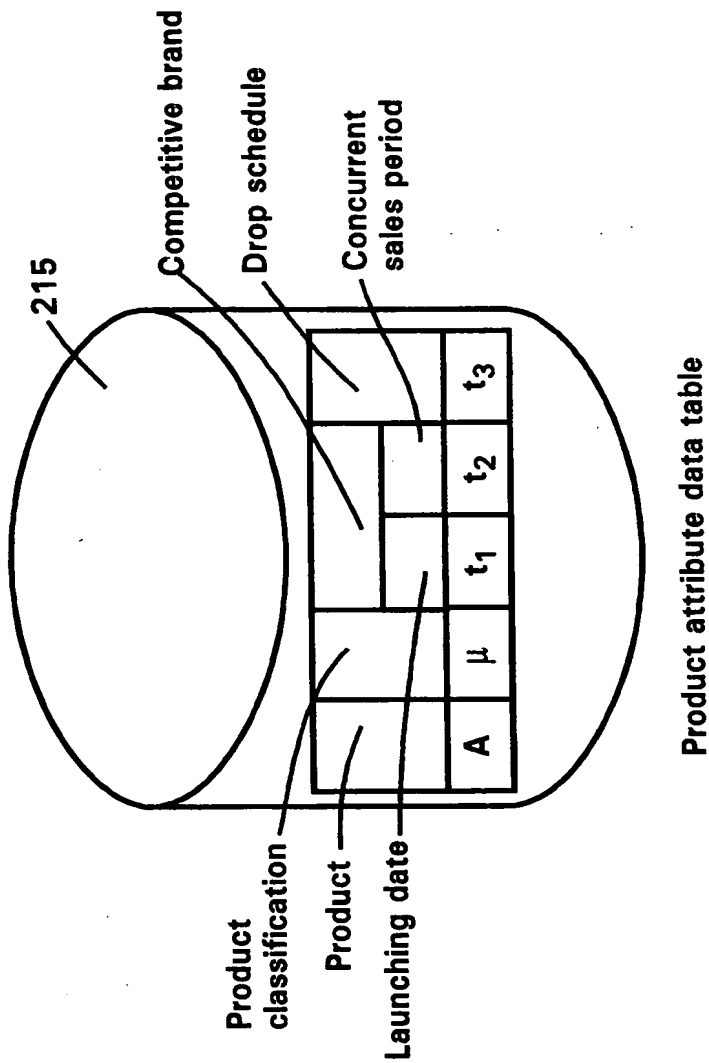
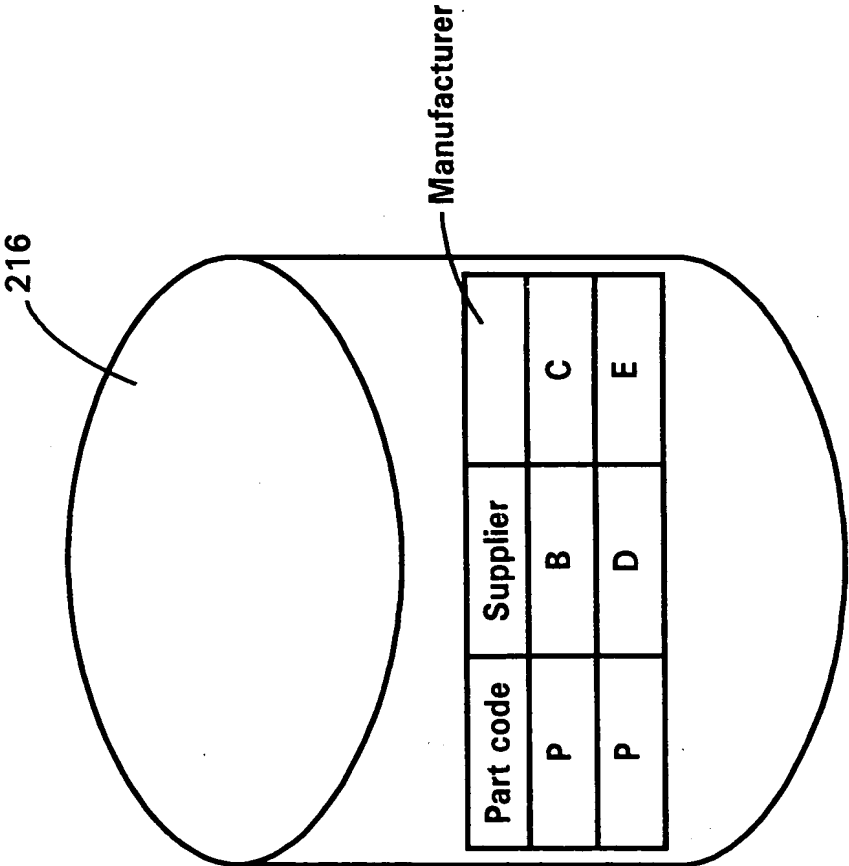
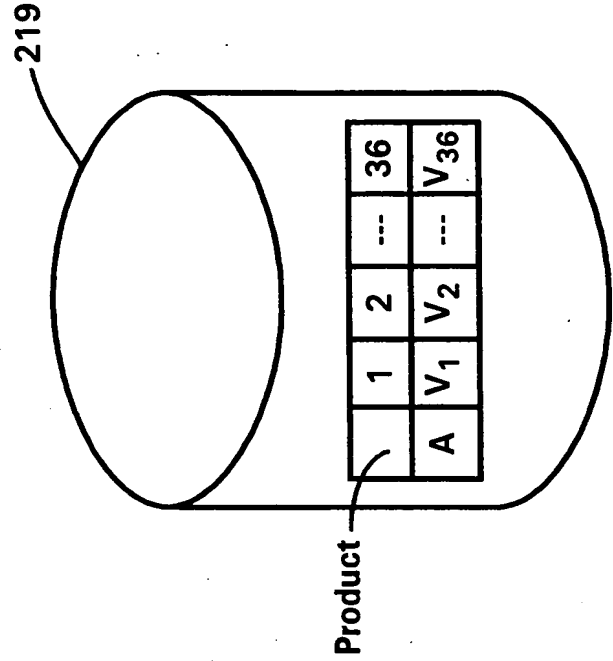


FIG. 44



Parts attribute data table

FIG. 45



Product sales data table

FIG.47

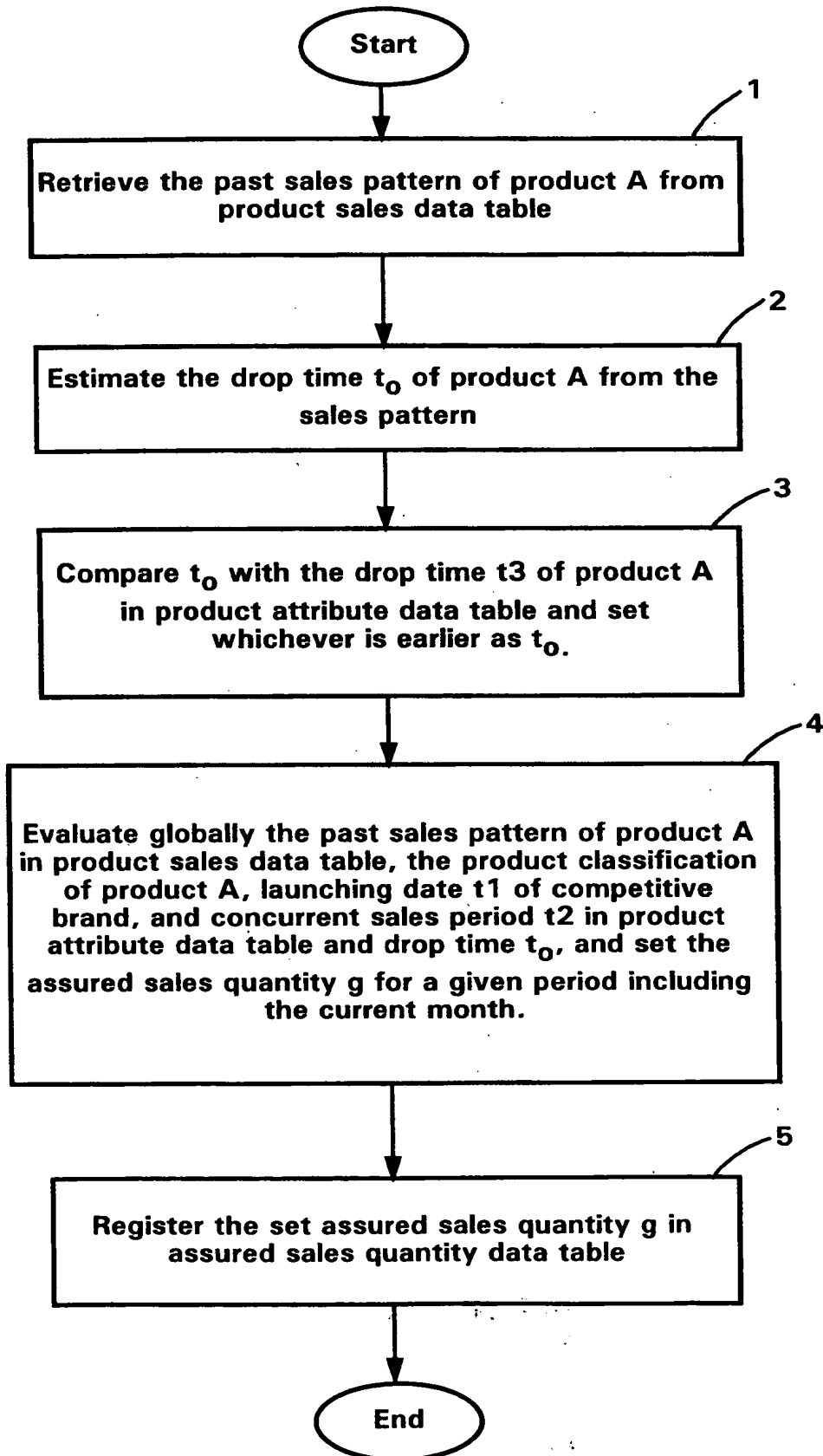
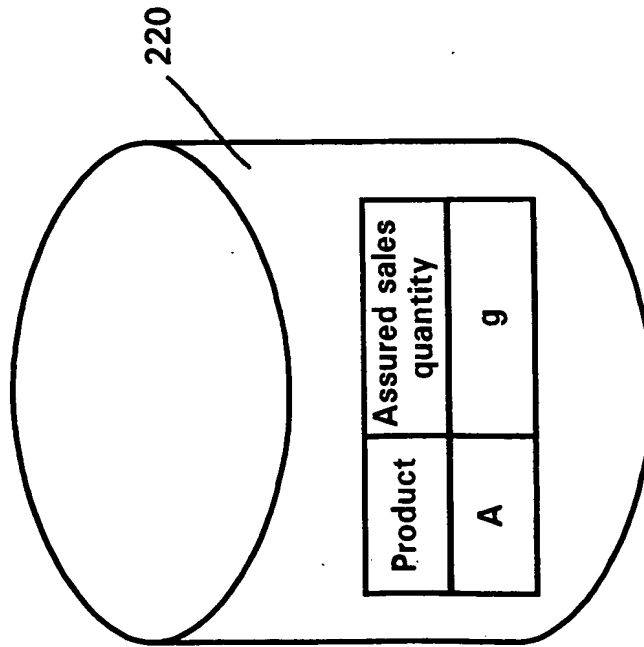
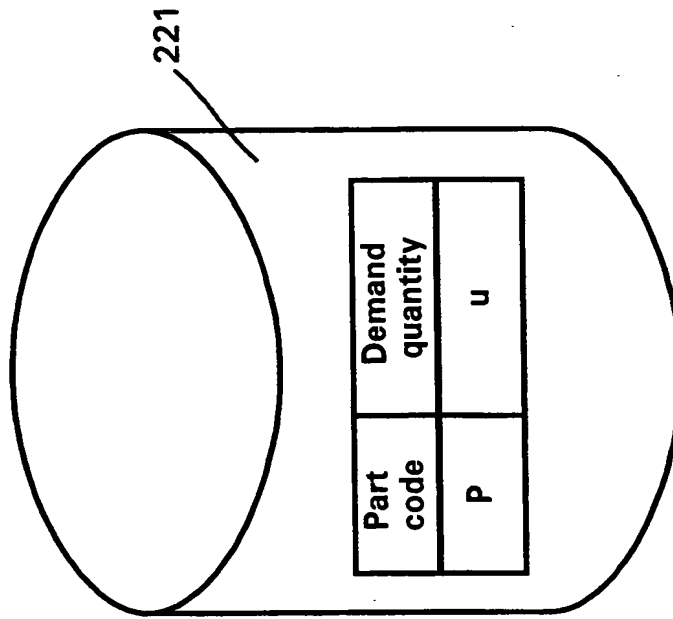


FIG.46



Assured sales quantity data table

FIG.48



Parts demand quantity data table

FIG.49A

Product	Assured sales quantity
A	10
B	25
C	5

220



Assured sales quantity data table

FIG.49B


214



Product	Part code	
A	q1	2
A	q2	3
A	q3	1
B	q1	1
B	q4	3
C	q5	1
C	q6	2

Product constitution data table

FIG.49C

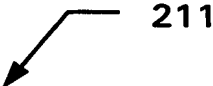


Mother part code	Daughter part code	Number of constituent units
q1	q7	1
q1	q8	1
q2	q8	2
q2	q10	1
q4	q7	1
q4	q9	2
q6	q9	3
q6	q10	1
q6	q15	2
q10	q12	1
q10	q13	3

Parts constitution data table

FIG.49D

Before - part code	After - part code
q11	q7
q11	q12
q14	q5



Parts processing data table

FIG.50

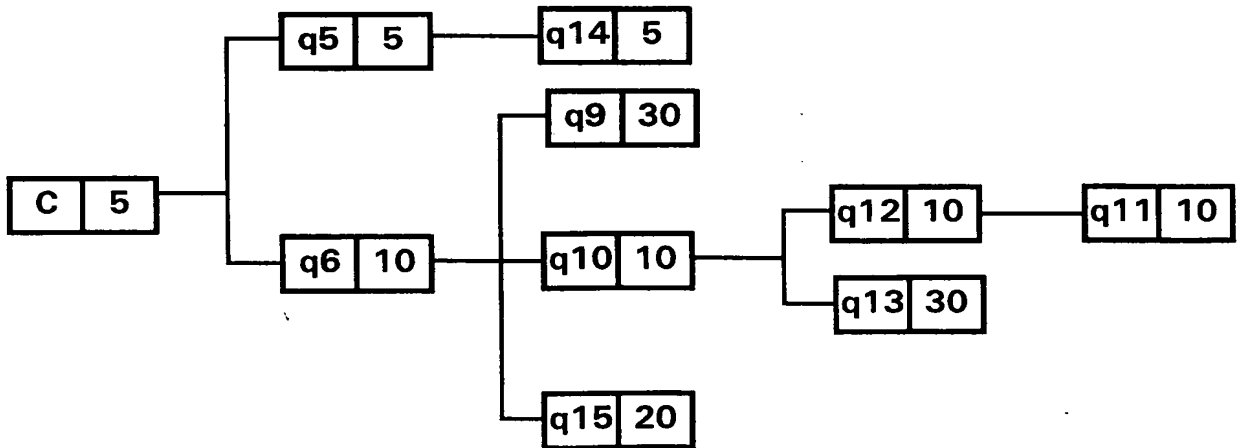
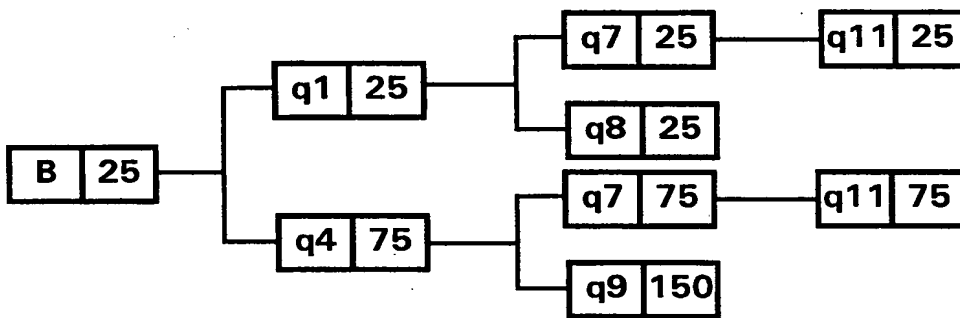
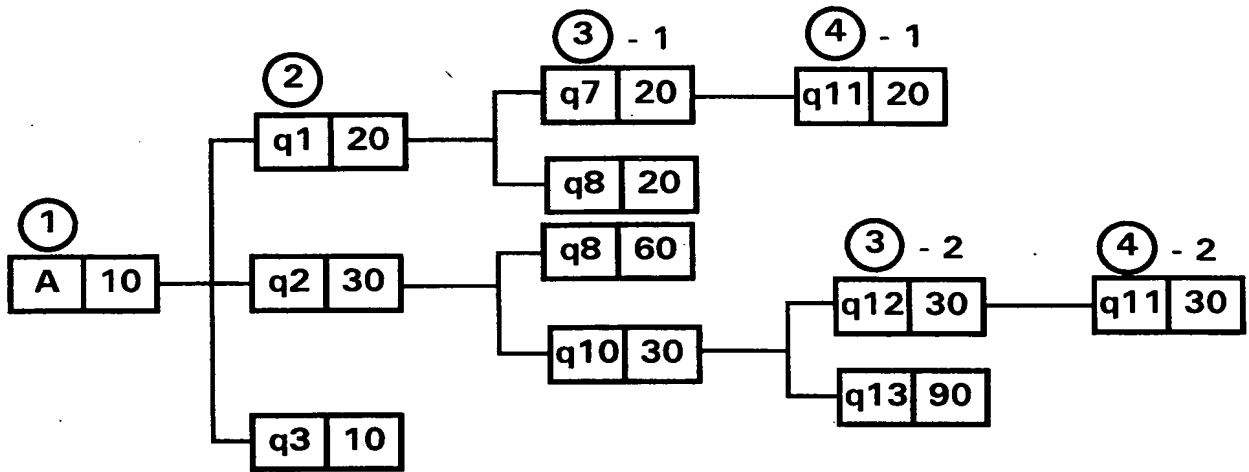


FIG.51

PART CODE	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12	q13	q14	q15
DEMAND QUANTITY	45	30	10	75	5	10	120	105	180	40	160	40	120	5	20

Parts demand quantity data table

FIG.52

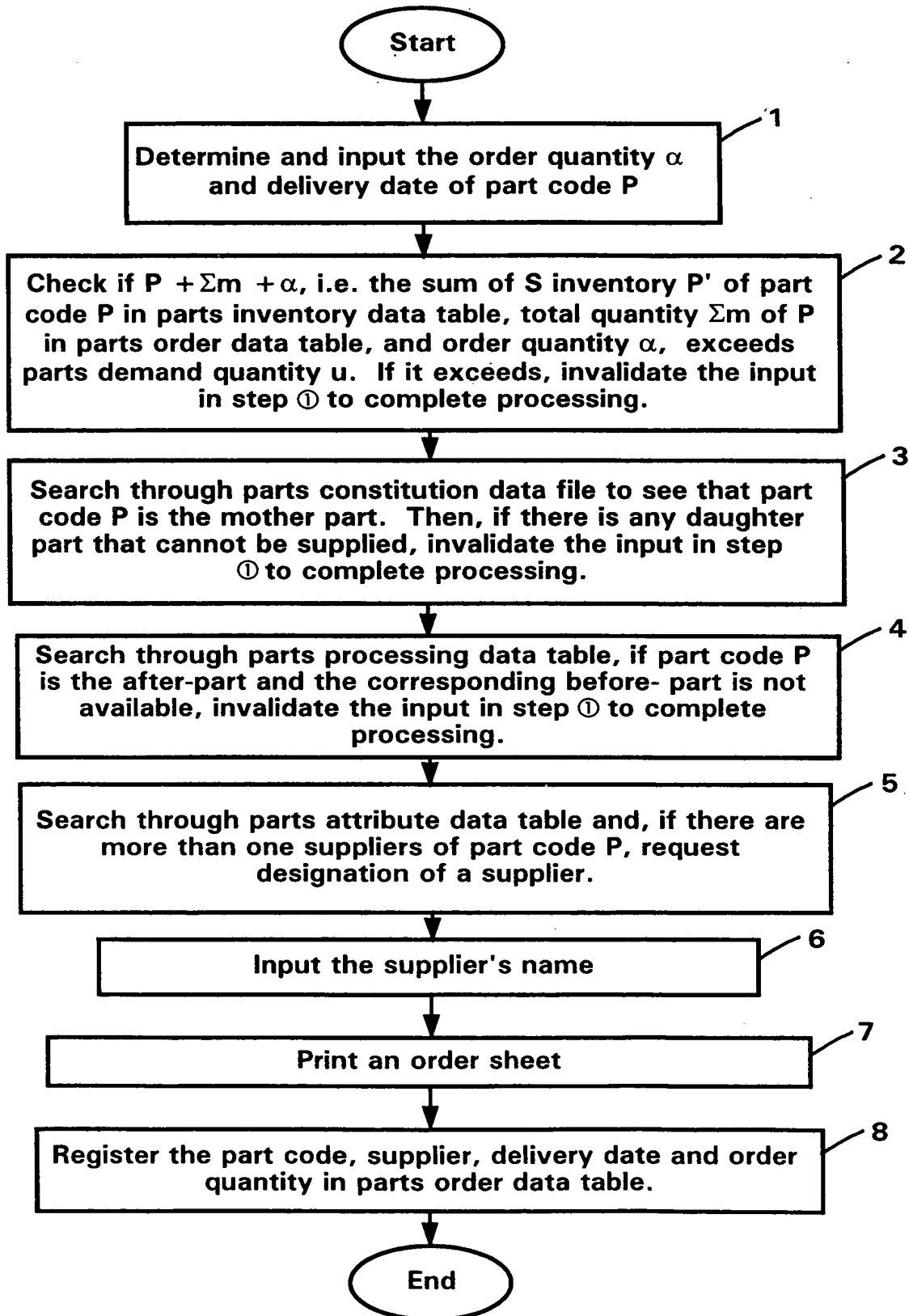


FIG.53

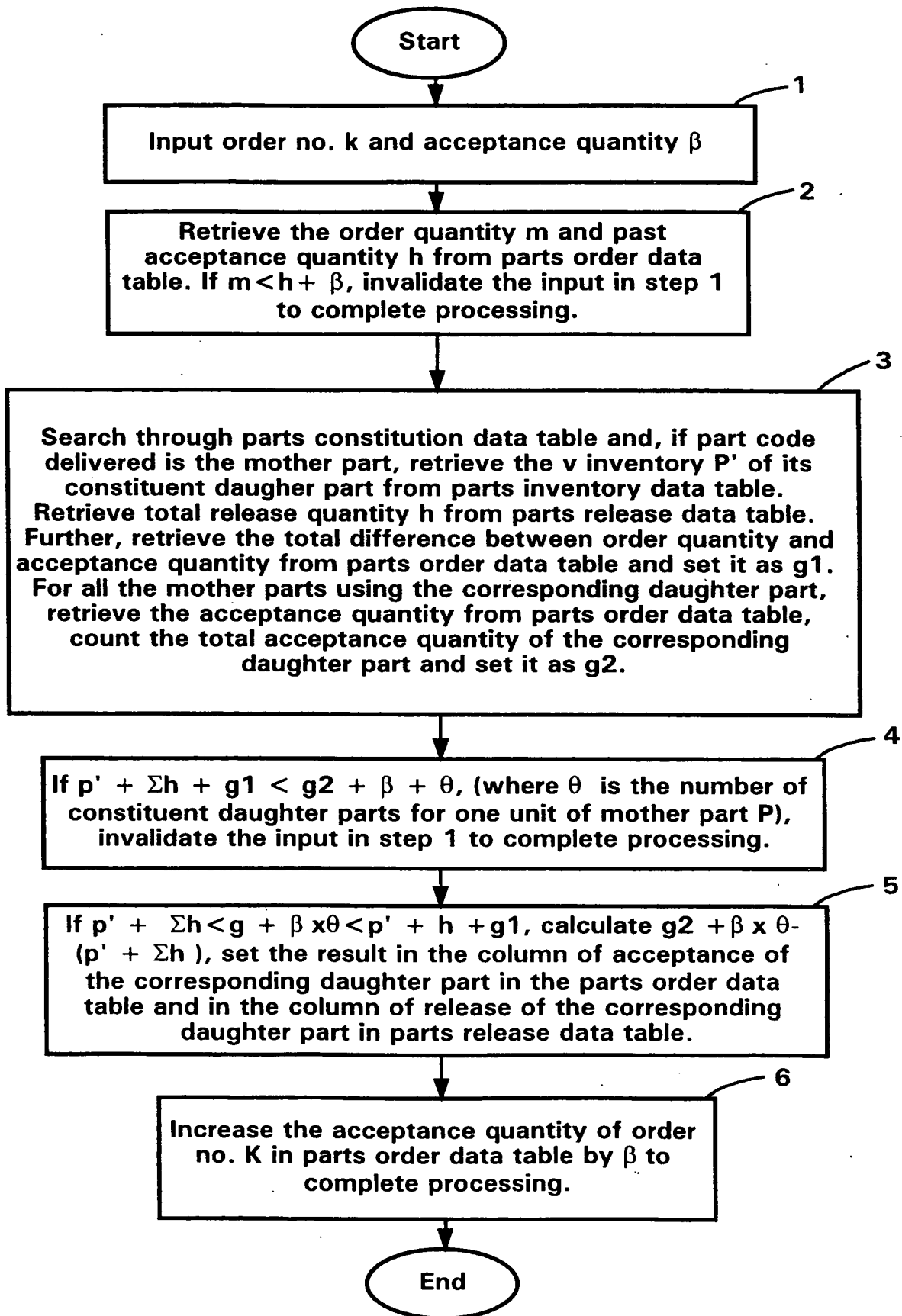


FIG.54

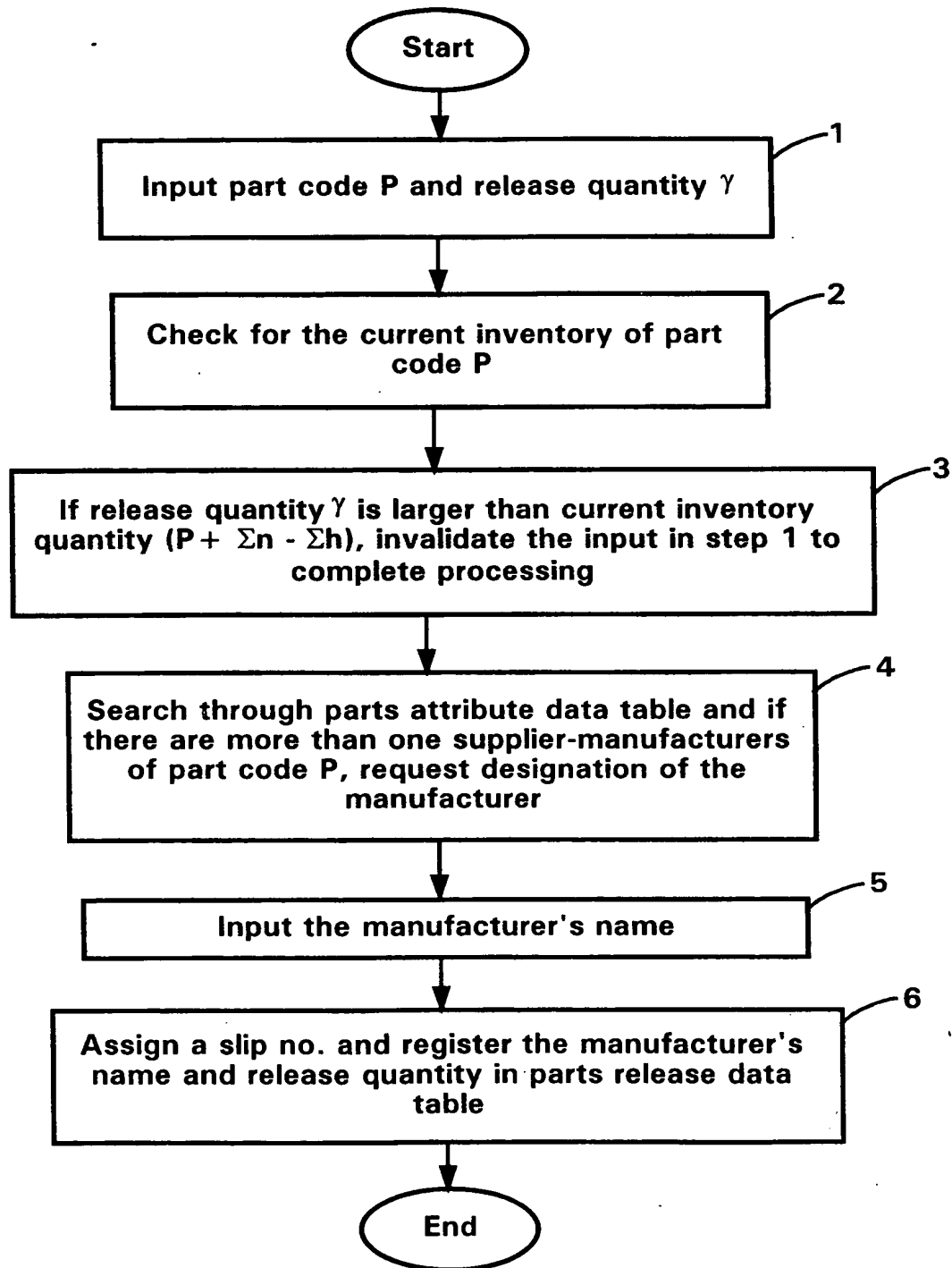
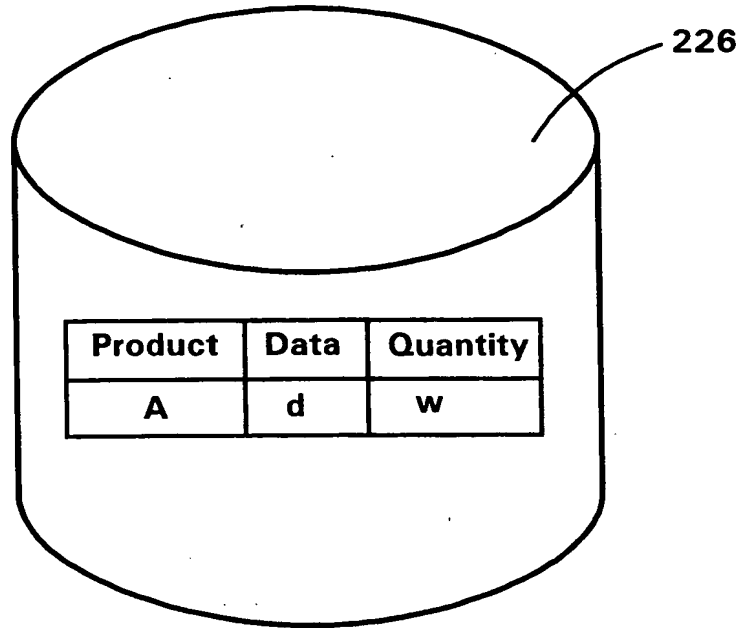


FIG.55



Production plan data table

FIG.56

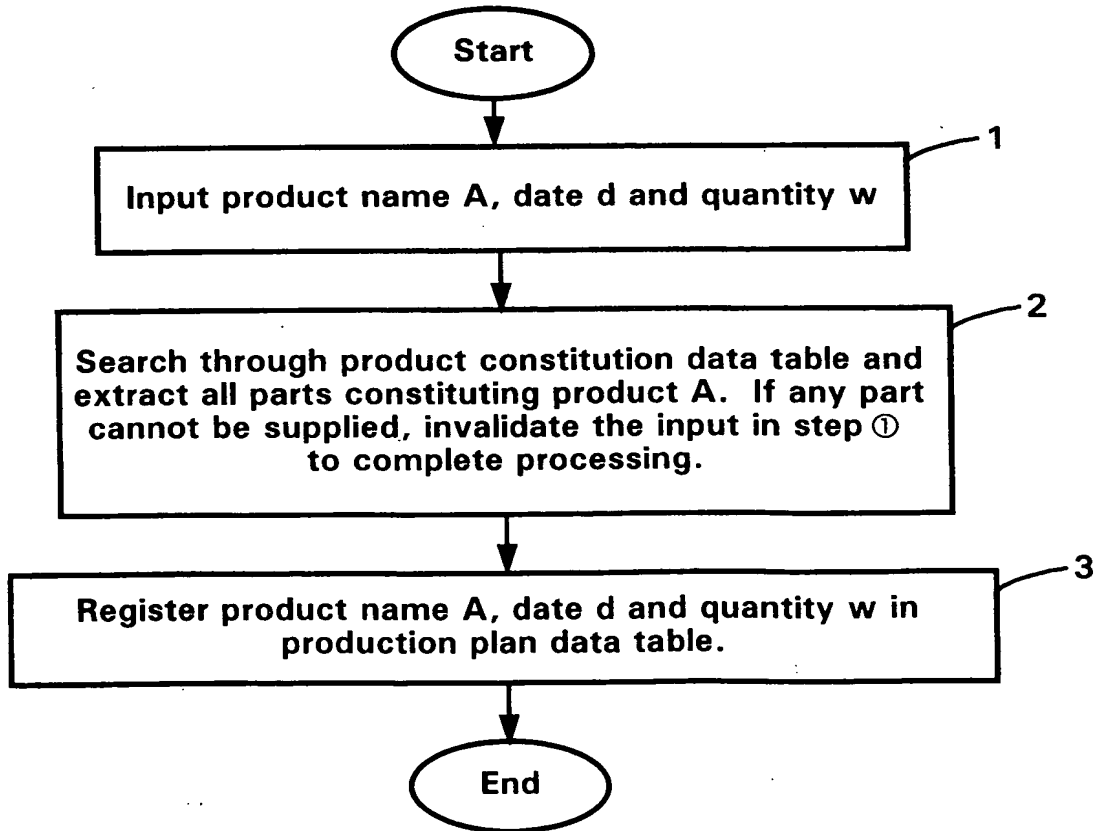


FIG.57

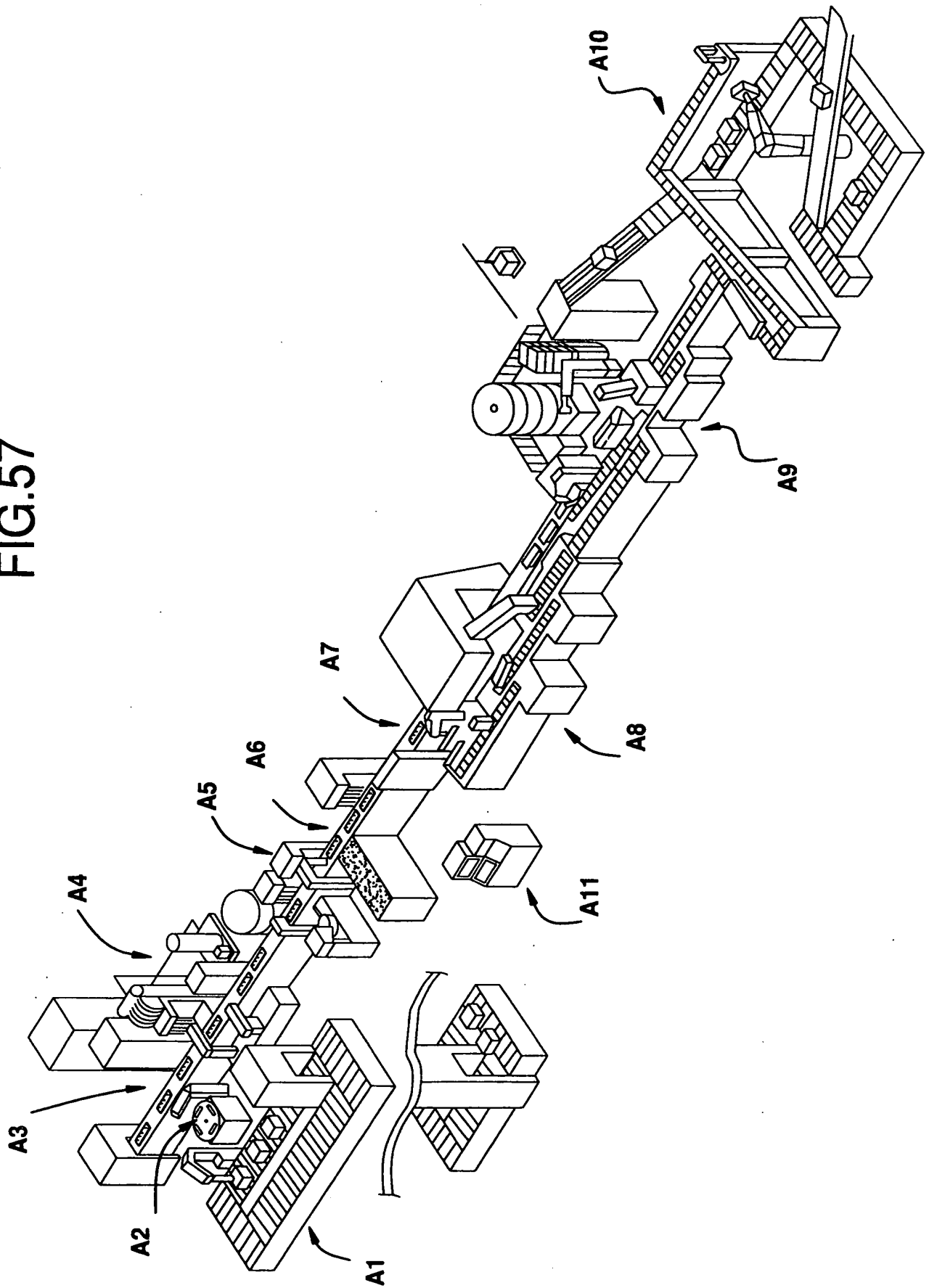


FIG.58

